

Report on The Census of
India,
1901

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REPORT

ON THE

CENSUS OF INDIA, 1901.

CHAPTER I.

Distribution of the Population.

Introductory Remarks.

1. In respect of those decisive physical features which determine the course of the national movements of mankind, India may be described as an irregularly triangular or pear-shaped fortress, protected on two sides by the sea and shut in on the third by the great bulwark of mountain ranges of which the Himalaya forms the central and most impregnable portion.* As these ranges curve southward and westward towards the Arabian Sea, they are pierced by a number of passes, practicable enough for the march of unopposed armies, but offering small encouragement to the halting advance of family or tribal migration. On the east, though the conformation of the barrier is different, its secluding influence is equally strong. The ridges which take off from the eastern end of the Himalaya run for the most part north and south, and tend to direct the main stream of Mongolian colonization towards the river basins of Indo-China rather than towards India itself. On either frontier, where the mountains become less formidable, other obstacles intervene to bar the way. On the western or Iranian march, the gap between the Suleiman range and the Arabian Sea is closed by the arid plateaux and thirsty deserts of Makran; to the east, the hills of the Turanian march rise in a succession of waves from a sea of trackless forest. On either side, again, at any rate within historic times, the belt of debatable land which veiled a dubious and shifting frontier has been occupied by races of masterless men knowing, in the west, no law except that of plunder and vendetta; and in the east, owing no obligation but the primitive rule that a man must prove his manhood by taking the stranger's head. Along the coast line a different set of conditions tended equally to preclude immigration on a large scale. The succession of militant traders who landed on the narrow strip of fertile but malarious country which fringes Western India, found themselves cut off from the interior by the forest-clad barrier of the Western Ghats; while on the eastern side of the peninsula, the low coast, harbourless from Cape Comorin to Balasore, is guarded by dangerous shallows backed by a line of pitiless surf.

2. The country thus isolated by physical and historical causes comprises three main regions, the Himalaya or abode of snow; the Middle Land, or Madhyadesa, as the river plains of Northern India are called in popular speech; and the Southern table-land of the Deccan with its irregular hill ranges rising out of undulating plains. Each region possesses an ethnic character of its own, and has contributed a distinct element to the making of the Indian people. The Deccan, itself one of the most ancient geological formations in the world, has, since the dawn of history, been the home of the Dravidians, the oldest of the Indian races. The most recent of the three regions, the alluvial plains of the

* Professor Huxley's comparison of the shape of India to "the diamond on a pack of cards, having a north angle at Ladakh, a south angle at Cape Comorin, a west angle near the mouth of the Indus, and an east angle near that of the Ganges," is possibly more accurate than that adopted in the text. It brings out the great projection of the Punjab and Kashmir towards the north and the long straight line of frontier which forms the north-western side of the diamond. On the whole, however, the triangular aspect seems to catch the eye more as one looks at a map and is thus better suited for descriptive purposes. Huxley's description is to be found in the first volume of the Journal of the Ethnological Society of London. It is curiously parallel to the 'rhomboid' of Herodotus and other Greek geographers.

north, formed in pre-historic times the highway of the Aryan advance into India, and a large section of its inhabitants still cherishes the tradition of remote Aryan descent. The influence of the Himalaya has been mainly negative. It has served as a barrier against incursions from the north; but all along the line of the hills, even among people whose speech is of Rājput origin, distinct traces may be observed of an intermixture of Mongolian blood.

4 Baluchistan.

3. The Empire of to-day has out-grown its ancient limits, and now embraces the Indo-Iranian region of Baluchistan and the Indo-Chinese region of Burma. If we speak of India as a fortress, these are the out-works which guard its flanks. Nor is it pressing our metaphor too far if we go on to describe Baluchistan as a great natural glacis stretching westward from the crest of the ramparts of India till it loses itself in the plains of Kandahar. Its surface is a medley of rocky peaks, narrow passes, intricate ravines, and broken ranges of barren hills, which bristle at every point with defensive positions. The people show no trace of Indian culture, and are as rugged as the land in which they dwell. Arab or Afghan by tradition, Scythian or Turki by type, but probably a blend of several stocks, they are fitting guardians of the inhospitable wastes which separate India and Iran.

5 Burma

4. The Eastern out-post, Burma, presents the sharpest of contrasts to Baluchistan. Broad stretches of alluvial rice-land fringe the coast strip and run up into the interior, gradually thinning out as they approach the highlands of earlier formation through which the great rivers have forced their way. Cut off from India by a series of forest-clad ranges, which restricted the interchange of population by land, Burma lay open on the north, east and south to the inroads of a succession of Mongolian races who bore rule in turn and combined to form the type which we know as Burmese. In the hands of a maritime power Burma commands the Eastern Gate of the Empire, and the growing Indian element in the population owes its existence to the English control of the sea.

Too large for analytical purposes

5. For statistical description and analysis, in which it is essential to compare like with like and to avoid unduly wide generalization, none of the five regions which have been mentioned, with the possible exception of Baluchistan, is compact or homogeneous enough to be handled with advantage. General statements regarding the population of such large areas as the Himalaya, the alluvial plains of the north, Southern India, or Burma, would have little more value than if they were made about India itself. Further sub-division must therefore be resorted to before any meaning can be extracted from the masses of figures heaped up in the Census Tables. On what principle should such sub-division proceed? Should our examination of the Census figures base itself merely on the administrative divisions of the country—Provinces, States, Agencies and the like—or should it follow what may be called the Natural Divisions of India—the areas distinguished by those essential characteristics of physical conformation, climate and rainfall, which influence, if they do not absolutely determine, the character and distribution of the population, and their standard of living? Or should a compromise be adopted and both methods of treatment combined?

Objects of the Census.

6. In the first place it must be remembered that our object is not purely scientific. The costly and laborious operations of an Indian Census can only be justified by their direct bearing on the actual government of the country. The Census presents a series of pictures of the national history of the past ten years, it sums up the effects of the vicissitudes of the seasons,—of religious and social movements, of educational effort, of commercial and industrial progress. It enables the rulers of India to take stock of their position and to see how it has fared with the people committed to their charge. For the current decade it fixes the statistical data on which all administrative action must be based. It tells the governing body what manner of men they have to deal with; how many will suffer from a failure of the rains or will benefit by a well-conceived scheme of irrigation; what are the prospects of a new line of railway; what proportion of the population will be reached by a reduction of taxation; to what extent an over-worked government can be relieved by a transfer of jurisdiction, and what interests will be affected by the change.

Form of the Tables.

7. Accordingly the entire series of statistics contained in the Census Tables is cast in a form determined by the practical uses to which they will be put. For the whole of India, Tables are framed on the largest scale. They deal with British Provinces, Political Agencies, the more important Native States and (a

new feature on this occasion) the chief cities of the Empire. For each Province, again, two sets of Tables are compiled, Imperial Tables with the District as their unit, and Provincial Tables which descend to more minute particulars and show the distribution of population by police stations or revenue circles, the smallest administrative units for which figures can conveniently be given. Below these in most Provinces voluminous Village Tables have been prepared, and in some instances printed, which deal with the smallest units of rural life and show for every village particulars for sex and religion, the chief languages spoken, and the main classes of occupations pursued, the latter being grouped with reference to the contingencies of famine, when special thought has to be taken for the increasing number of landless day-labourers and for those who still struggle to earn a precarious living from the moribund industry of hand-loom weaving.

Natural and Administrative Divisions.

8. To ignore these administrative units and to base the discussion of the statistics on areas determined by conditions of rainfall and soil, would condemn the report to be useless for the chief purposes which justify its existence. What the governor of a Province or the head of a district wants to know is the distribution of the people in the tract of country for which he is responsible. It avails him nothing to be told how they are grouped in some climatic unit which does not correspond with his own executive charge. Famine is fought, revenue collected, justice administered by Provinces and districts, not by zones of rainfall. For the most part, therefore, we must follow the divisions which regulate the actual work of Government. But within these are wide differences dependent for the most part on the aggregate of physical conditions commonly called environment. By grouping the provincial figures under the chief natural divisions some light may be thrown on the physical causes which affect the distribution of the people within the Province. Both methods, therefore, must be followed. The facts must be stated by units of administration, and the theory expounded by units of environment. The former units are ready to our hand in the shape which history, accident, convenience have in course of time given them. It is less easy to say on what principle the latter should be defined.

9 At first sight the meteorological aspects of the subject are those which arrest our attention. In a country where from 50 to 84 per cent. of the population depend for their living on the land and prudential restrictions on the birth-rate are unusual; where a short or untimely monsoon means famine, and seasonable rain conjures up immediate prosperity; one is tempted to assume that a classification by zones of rainfall and humidity will comprise all the conditions which affect the distribution of population. The most densely peopled tract in India, a taluk in the Cochin State with 1,920 persons to the square mile, has the heaviest and most regular rainfall, and, conversely, the scantiest population is found in the almost rainless regions of Jaisalmer. The proverbs of the people confirm what appears to be the teaching of statistics. They say in Marwar, where emigration and the breaking up of families under the stress of famine have left a deep impression upon popular speech,—

“ August’s here, no sound of thunder,
 Sky is clear, and weather fine :
 Wife ! ’tis time for us to sunder,
 You to your folk, I to mine.”

And this is only one instance, no doubt a specially intimate and pathetic one, of countless apothegms on a subject which touches the very life of the Indian peasant. It is true that the relation between rainfall and population is not always so direct and tangible as in the thirsty steppes of Western Rajputana. In Burma the maximum density does not correspond with the most copious rainfall, and some of the wettest tracts are conspicuous for their scanty population. Mergui, with a rainfall of nearly 170 inches, has only nine persons to the square mile, while Sagaing, in the dry zone of Upper Burma, gets less than 50 inches of rain, and shows a mean density of 152. Here, as Mr. Lewis has pointed out, the physical conformation of the surface plays the chief part in determining the strength of the population. The lowlands, whether wet or dry, lend themselves to cultivation and have access by river to the centres of trade.

Natural and administrative units

Influence of rainfall on density of population.

They support, therefore, a greater number of people than the more remote uplands where a larger rainfall finds less cultivable land to fertilise, and the crops are less easily brought to market.

Other counteracting influences.

10. Other instances may be cited of the fallibility of a purely meteorological standard. To take an extreme case, the irrigation canals of the Punjab, drawing a perennial supply of water from rivers fed by the snows, have rendered large tracts independent of the local rainfall and have transformed a desert into a fertile and populous cornfield. Conversely, a country covered with dense forest, whatever may be its rainfall, must wait for its population until the jungle has been cleared. In hilly districts the proportion of cultivable land is smaller than in level tracts, and the area cannot support so large a number of people. In the undulating country of the Vindhya tract, where rice is grown on terraces cut out of the hill side, the relation between the higher and lower levels is such that the harvest does not vary directly with the rainfall. Excessive rain swamps the rich lowlands while, as often as not, the loss from deficient rainfall affects only the poorest lands. In some parts of the country, such as the Himalayan Terai and those Assam Districts which have suffered from *kalá ázár*, conditions may be so unhealthy as to restrict the birth-rate and to allow only selected individuals to survive. Elsewhere, again, the character of the people may play a part in counteracting the influence of their surroundings. The recent famine has proved the sturdy Maratha of the Deccan to have far greater power of resistance than the softer people of Gujarat. And it may plausibly be argued that the dense population of certain parts of Bihar is only rendered possible by the readiness of the people to go on reducing their standard of living rather than tempt fortune by emigrating in search of spare land. Finally, it is obvious that the meteorological statistics, at any rate in the condensed form which alone can be used for classification, throw, at the best, but an uncertain light on the two main factors of agricultural prosperity, the variability of the rainfall and its distribution at the times when it is most required. The latter condition is often the more important. Let the rainfall of the year be never so abundant in the aggregate, it may commence too late to soften the baked soil for early ploughing and timely sowing; an unlucky break may allow the land to dry when the seed is about to germinate; storms may destroy the plants as they are breaking into flower; and finally, if the rain stops too soon, the grain will shrivel and turn to husk in the ear. Of these critical periods statistics can give no complete account. They stand out in the proverbs of rural life, which divide the year into 27 lunar asterisms of about a fortnight in length. Each asterism corresponds to some agricultural operation, and each has its appropriate sayings. Thus for the fortnight or so at the end of October and November, when the rice in Bihar is reaching maturity and the right amount of rain will give a bumper crop, we have the couplet:—

“One shower in Swáti—friend, behold
The Kurmi’s earrings turned to gold!”

It would be hard to give a more vivid picture of the nice issues on which the peasant’s luck may turn, and of the manner in which he spends the proceeds of a good harvest.

Natural Divisions of India.

11. Subject to these qualifying remarks, which indicate some obvious limitations of the principle, meteorology seems to be on the whole our safest guide through the complications presented by external conditions in India. Two schemes of natural divisions, both based chiefly on meteorological characters, have the sanction of high scientific authority. One was drawn up in 1901 under Lord Curzon’s orders by Sir John Eliot, K.C.I.E., F.R.S., Meteorological Reporter to the Government of India. The other was published a few months later by Mr. W. T. Blanford, F.R.S., as part of a paper, in the Transactions of the Royal Society, on the Distribution of the Vertebrate Animals in India, Burma and Ceylon.* Excluding the Andamans and the country beyond the main snowy range of the Himalayas, each of them divides the Empire into a manageable number of tracts or sub-regions. Sir John Eliot’s scheme has twenty; Mr. Blanford’s fifteen, a number which admits of being reduced to fourteen by certain changes which the author has kindly mentioned to me. From the point of view of population both are perhaps capable of improvement, but the process of recasting

* Philosophical Transactions of the Royal Society of London, Series B, Volume 194. The scheme is reproduced in Note (1) at the end of this chapter, with the changes referred to above.

them would multiply the number of divisions to a bewildering extent, and would result in a grouping which would at many points overlap the meteorological classification. Moreover, Sir John Eliot's scheme is in possession of the field. It has been adopted by the Government of India for the purposes of the daily reports and maps showing rainfall and temperature, which give the first warning of the approach of famine. It is, therefore, familiar to the large public, both official and non-official, which watches over the countless interests dependent on the vagaries of the monsoon. For administrative reasons, again, it is obviously desirable that the Census Statistics should, at any rate in the Imperial Report, be brought into relation with these authorized divisions of India, and that figures should be given showing what population will be affected by unfavourable conditions in a given meteorological tract. Subsidiary Table I accordingly sets out the population, density and staple crops of each of these standard divisions, together with statistics of the normal rainfall, its distribution by locality and its seasonal variability, which were specially prepared for me in the office of the Meteorological Reporter on the basis of observations extending in most cases over a period of twenty-five years. The rainfall of each division and the mean density of its population are also shown on the accompanying map. The information here given is, I believe, nowhere available in a connected form, and this must be the excuse for the space devoted to the subject in the following pages. At the close of a period marked by the occurrence of famine on a scale hitherto unknown, it seems desirable to present with some fulness of statement the facts which illustrate the extreme dependence of the Indian people on climatic conditions, the variety of those conditions in different parts of the Empire, and the great vicissitudes to which they are liable at periods which tend to recur but the law of whose recurrence is as yet unknown.

12. In the Provincial Reports the question of grouping is approached from a different point of view. The area dealt with is smaller, the necessity for reducing the number of divisions is less. The object, in fact, is rather to accentuate climatic distinctions than to sink them in groups arrived at by large generalizations. Accordingly, although I invited Provincial Superintendents to conform as closely as possible to the Imperial scheme of divisions, I did not insist on their adopting it as it stands and I have admitted a number of departures from it which are explained in the Provincial Reports.

13. The principal source from which India derives its rainfall is the moisture-laden current of the south-east trade winds, which blow steadily in the zone of the Indian Ocean extending from Australia to Madagascar. If these winds maintained their original course they would pass India by altogether, and would break upon the coasts of North-East Africa and Arabia. But in early summer, when they reach the region of the Chagos and Seychelles islands, they begin to come under the influence of the great land mass of India which by that time has become very much hotter than the surrounding ocean. From the heated surface of the Indian Continent the air rises upwards and outwards and a gigantic vortex is formed within which the pressure of the atmosphere, as indicated by the barometer, is relatively low. The damp air of the south equatorial seas, until then travelling in a north-westerly direction, is drawn due north by the influence of this depression and after passing the equator is further diverted towards the east by the rotation of the earth. By these combined forces the south-east trades are converted into the south-west monsoon which breaks with its greatest strength on the West Coast of India and traverses the whole Continent until it strikes the great barrier of the Himalaya. Here its course is arrested and turned westward and north-westward towards the Punjab, where it gradually dies away during September. With the approach of autumn a different set of conditions comes into play. As the sun turns southward towards the Equator, the temperature of the land surface falls in comparison with that of the sea, and an area of relatively low barometric pressure is established in the Indian Ocean to the south of the Bay of Bengal. The south-west monsoon, recurving from the Burma coast towards this depression, is merged in the weaker current of the north-east monsoon which gives fairly copious and regular rain in Madras. In point of fact both monsoons or 'seasons' form part of one vast atmospheric movement depending ultimately on the relative intensity of two areas of high pressure or anticyclonic action,

Modified for
Provincial
use.

Sources of
rainfall :
(1) Monsoon

one in Central Asia and the other in the south of the Indian Ocean. These may be compared to the two ends of a spirit level, and the area of low pressure between them to the bubble of air in the middle of the instrument. Changes in the relations between the ends of the atmospheric level shift the centre of low pressure northward or southward at different times of the year. These movements determine the direction of the monsoon winds which bring the rain.

(2) Cyclonic
Storms.

14. The setting in of each monsoon is preceded or accompanied by cyclonic storms due to the formation of a trough of low pressure between winds blowing in different directions. Such storms are generated in two main centres, one near the Andamans in the Bay of Bengal and another in the region of the Laccadive and Maldivé islands in the Arabian Sea. Some of them penetrate far inland and on occasion give useful rain to areas which may have been but lightly touched by the monsoons.

(3) Himalaya
(4) Plateau of
Iran.

15. Two other influences, the Himalaya and the plateau of Afghanistan and Persia, contribute to the meteorology of India. The great wall of the Himalaya shields Upper India from the cold air currents of the Tibetan plateau, and the extension of its snow-clad surface during the winter brings about a constant interchange of humidity between the hills and the sub-montane country, which occasionally re-acts upon the distribution of the monsoon rains. The plateau of Iran, on the other hand, is visited by storms from South-Eastern Europe, which produce snow in Afghanistan and Baluchistan, followed by a wave of dry cold air which, as it advances to the eastward, reduces temperature and humidity all over Northern India and brings about the cold weather rains.

Their
seasonal
effect.

16. The combined effect of the influence of the Himalaya and the Iranian plateau is to give India during the period of the north-east monsoon a Continental climate with dry air, land winds, very little rainfall, and a high range of daily temperature. During the rest of the year the Indian Ocean, with its branches the Bay of Bengal and the Arabian Sea, exercises a predominant influence and produces an oceanic climate characterised by frequent rain, very damp air, and a low range of daily temperature.

Natural
divisions
described.

17. The following brief description of the natural divisions is based upon notes kindly furnished me by Sir John Eliot and Mr. Holland of the Geological Survey, and upon Mr. Blanford's paper mentioned above, which he has been good enough to permit me to use. The description follows the order of the five Regions of India—the Himalaya, the River-plains, the Deccan, Baluchistan and Burma.

Himalaya and Sub-Himalaya West.—This tract includes the forest-clad ranges of the Western Himalayas from the confines of Kohistan to the eastern border of Garhwal; a narrow belt of country at the foot of the hills from Rawalpindi to Roorkee at an average elevation of 1,000 feet; and the low valley of Dohra Dun, 2,200 feet above the sea. Slates, schists, quartzites and dolomitic limestones form, with granites and gneisses, the higher ranges of the inner or north-eastern margin. A band of younger tertiary strata occurs in the centre, bounded on the south-western margin by geologically recent alluvium.

The average rainfall in the hills is 50 inches, but the actual fall varies from nearly 26 inches in Kashmir to 29 inches at Mussoorie. It increases gradually towards the east, and is more copious on the southern aspect of the ranges than on the northern. In the semi-montane area of Dohra Dun the rainfall is 85·73 inches, while in the plains districts it is heaviest at Roorkee (42·39) and lightest at Ludhiana (29·44), the annual mean being 34·25. The variability ranges from 88 at Umballa to 128 at Sialkot and 141 at Ludhiana. The wet season proper sets in in June, but is very uncertain in its approach, depending apparently not entirely upon the intensity of the hot weather conditions in Northern India, but largely also upon the initial strength of the south-west monsoon currents passing up the Arabian Sea and the Bay of Bengal.

18. *Himalaya and Sub-Himalaya East.*—This tract embraces the Himalayas and a wide belt of country at the foot of the hills from Garhwal and Dehra Dun to Bhutan and Kuch Bihar. The climate is moister than in the western tract, the forests denser and more extensive, and the growth of vegetation more luxuriant. Geologically it is an extension of the formations exposed in the western division.

The meteorology of the plains districts differs little from that of the Central Indo-Gangetic Plain. Proximity to the hills affects temperatures and rainfall

to a slight or moderate extent, reducing temperature and increasing humidity, cloud and rainfall. The rainfall varies very largely in amount, decreasing with distance westwards along the Himalayas and also with distance from the Himalayas. The annual amount ranges from 125 inches at Jalpaiguri to 45 inches at Bahraich and Bareilly, the average being 71.9 inches. The variability is 143 per cent. at Purnea, 71 per cent. at Darbhanga and 78 per cent. at Bahraich.

19. *The Indo-Gangetic Plain West* comprises the central plain districts of the Punjab and the United Provinces from Lahore to Allahabad. Its geological formation consists of tertiary rocks in the north-west corner, with a narrow band of older rocks forming the Salt Range to the north-west of the Jhelum. The rest of the division is covered by recent alluvium.

The wet season extends from about the middle of June to the middle or end of September. The monsoon influence commences very irregularly, and the rains are in some years a fortnight to a month later at Delhi and Lahore than at Allahabad. The mean rainfall decreases from 38 inches in Allahabad to 20 inches at Lahore, the average for the division being 31 inches. The variability ranges from about 100 per cent. at Delhi and Meerut to about 160 per cent. at Cawnpore and Lahore, and averages 180 per cent. for the division.

20. *The Indo-Gangetic Plain East* takes in West Bengal, Central and South Bihar and the adjacent districts of the United Provinces—Mirzapur, Benares, Jaunpur, Ballia, Azamgarh and Ghazipur. Recent alluvium covers both ends of the tract, with a considerable area of ancient gneisses forming highlands in the centre. The division includes large mica-mining and slate-quarrying areas, as well as several important coal-fields in small basins of Gondwana rocks.

The average rainfall of the division is 47.46 inches, varying from nearly 40 inches at Benares to 56.38 in Burdwan. During the dry season it is small, but it increases very rapidly in June, with the setting in of the south-west monsoon, and is greatest in July, averaging 12.19 inches. It is practically the same in amount in August and decreases rapidly in September and October. Fifty per cent. of the total rainfall of the year occurs in July and August. The rainfall is least variable at Burdwan where it is 70 per cent., and the variability increases westwards to 94 per cent. at Gaya.

21. *The Delta of Bengal* includes the southern and eastern districts of Bengal and the Surma Valley districts of Assam. It consists of a flat open plain elevated from 13 feet to 104 feet above the level of the sea and exposed to its full influence. Gneisses and schists, forming the Shillong highlands, mark the extreme northern fringe of the division below Cherra Punji, where cretaceous and tertiary beds with occasional coal-fields begin; these are limited on the southern side by the alluvium of lower levels, which covers most of the division up to the folded tertiary strata of Hill Tippera on the east.

The average rainfall is 79.88, varying from 56.49 at Murshidabad to 125.89 at Silchar. Owing to storms generated by the meeting of moist winds from the Bay of Bengal with the dry westerly winds of the Gangetic plain, nearly 20 per cent. of the total annual rainfall is received during March, April and May, a fact which has an important bearing on the agriculture of the area. The rest of the supply is derived from the current of the south-west monsoon which sets in during June and continues till October, when it is frequently followed by cyclonic storms of great violence accompanied by destructive tidal waves.

22. *The Brahmaputra Valley* is an unusually well-defined meteorological area. It lies between the Himalayas and the Garo, Khasi and Jaintia and Naga Hills, commonly known as the Assam range, which have a mean elevation of about 3,500 feet. It is about 300 miles in length by 50 miles in breadth, and varies in elevation from 115 feet at Dhubri to about 350 feet at Dibrugarh. The river Brahmaputra and its feeders take up a considerable portion of the area. The meteorology differs very considerably from that of Northern India, due to the relatively large proportion of water and of forest-clad surface and to its being enclosed by walls of hills on all sides except the west, where it joins the Indo-Gangetic Plain. For the Assam hills the meteorological data are scanty, but the rainfall is known to be very heavy in places. Strictly speaking, perhaps, the range should be treated as a separate division, but the population is too small to warrant this course. On the north of the division the older rocks of the Himalayan system are fringed with sub-montane tertiary deposits. These in their turn

give place to recent alluvium above which, in the south of the division, gneisses and schists rise to form the Shillong plateau.

The average rainfall of the valley is 92·36, varying from 70·17 at Tezpur to 110·57 at Dibrugarh. From November to February it is small in amount and increases eastwards. The spring rainfall begins in March and increases up to May, in which month it gives an average of nearly 13 inches to the valley. During this period hailstorms are frequent, and destructive tornadoes or whirlwinds occur occasionally. The south-west monsoon rainfall commences in June and continues until October. Its distribution is apparently determined chiefly by the elevation of the hills to the south. It is largest at the eastern end of the valley and at the western entrance at Dhubri, and diminishes from north-east and west towards the centre, being smallest in Tezpur and the neighbouring districts in some parts of which it is below 50 inches. The variability of rainfall is moderate. It is greatest at Dhubri and diminishes eastwards to Sibsagar where it is about 50 per cent. The chief features of the area are great humidity, moderate temperature and a prolonged period of moderate to heavy rainfall extending from March to October. These conditions are peculiarly favourable to tea cultivation.

23. *The North-West Dry Area* includes the Southern and South-Western Punjab, Sind, and the States of Rajputana situated north-west of the Aravalli Hills. A great part of its surface is covered with recent blown sands and alluvium through which small exposures of older rocks protrude. Vegetation has been destroyed over large areas by alkaline salt efflorescence.

The average rainfall of the division is 11·4 inches, the highest being 25·1 at Cherat and the lowest 3·9 at Jacobabad. The variability of the rainfall is the highest in India (195 per cent.), and ranges between 80 at Cherat and 362 at Pachpadra. The winter rain falls between December and March. It is small in amount, averaging about two inches, but is fairly general and uniformly distributed. The main current of the summer or south-west monsoon in July and August is diverted towards the east, and such rain as the division receives is derived from cyclonic storms and is very variable and irregularly distributed. It is moreover so small in amount that cultivation depends over large areas on irrigation from the Indus, and fluctuates from year to year with the height of the floods. The whole area is extremely dry and is believed to be one of the hottest in the world. A temperature of 126° was recorded at Jacobabad on the 12th June 1897.

24. *The Central India Plateau* lies between the Aravalli and Vindhya Hills and the Gangetic Plain. It is about 2,000 feet in elevation near the Vindhyas and Aravallis, but slopes north-eastwards and eastwards to the level of the Gangetic Plain. The north-west section consists of gneisses and granites with old schists and slates of the Aravalli range, and palæozoic strata. The south-west portion is covered by basaltic lava-flows.

The dry season commences in the latter part of September in the northern and the central districts of this area and about the middle of October in the southern districts. The tract comes within the influence of the cold weather storms of Northern India, and thus receives light, occasional rain between December and February. These storms are accompanied, in Rajputana and Central India, by thunderstorms and hailstorms of considerable intensity which cause much damage to the poppy and other crops. The total rainfall from November to May averages 2·23 inches in amount, and is barely 7 per cent. of the total rainfall of the year. The wet season usually commences about the middle of June and continues until October. The rainfall is irregular and intermittent, especially in Rajputana, and a considerable proportion is due to cyclonic storms formed in the Bay of Bengal which advance across the Central Provinces and Central India and have sufficient vitality to continue their course through Rajputana. The rainfall decreases northwards from the Vindhyas and westwards from the Gangetic Plain to the interior of Rajputana. It averages 31·58 inches for the whole area, but is less than 30 inches in amount over the whole of Rajputana and in parts of Central India. It is absolutely least at Ajmer and Sambhar, where it very slightly exceeds 20 inches, while at Saugor it rises to 47·83. The fall of 60 inches at Abu is dependent on special conditions. The variability of the rainfall is about 100 per cent. at Sutna, Saugor, Kotah, and Indore,—all stations near the Vindhyas. It increases rapidly

northwards, and exceeds 150 per cent. in the driest area represented by Jaipur and Sambhar. The combination of small annual rainfall (between 20 and 30 inches) and great variability (of about 150 per cent.) renders a large part of Rajputana liable to recurring drought.

25. *The West Satpuras Division* includes Berar, Khandesh and Nasik in Bombay, and the Nagpur, Nimar and Wardha districts of the Central Provinces. Nearly the whole of the tract is covered with the basaltic lava-flows of the Deccan plateau. Small areas of alluvium appear in the Tapti and Nerbudda valleys. The dry season lasts from November to May, during which period the average total rainfall is only 2·6 inches or 7 per cent. of the year's supply. In April and May the temperature is very high and has been known to exceed 115° at Nagpur.

The annual rainfall averages 39·1 inches. It varies considerably, being largest in the eastern district of Nagpur (49·25 inches) and smallest in the western district of Khandesh represented by Malegaon (23·08 inches). It is derived partly from strong bursts of rain on the Konkan Coast and partly from cyclonic storms advancing from the Bay of Bengal across the Central Provinces or Central India. The latter action appears to be the more powerful as the rainfall decreases in amount westwards from Nagpur to Malegaon. The variability of the rainfall varies, on the whole, inversely with the actual amount. It is least at Nagpur (98 per cent.) and greatest at Akola (164 per cent.) and Malegaon (180 per cent.). It follows from these conditions that the western districts of the division, including Khandesh and Nimar, are liable to drought and famine.

26. *The East Satpuras Division* comprises the greater part of the Central Provinces and the Chota Nagpur division of Bengal. The principal geological formations are old gneisses, granites, and schists covered for a considerable area by basaltic lava-flows (Deccan trap) on the north-west, with a fringe of Gondwana rocks and recent alluvium in the Nerbudda valley. The meteorology of this division differs only slightly from that of the West Satpuras. In the hot weather the heat is not so extreme, nor is the air so dry. In the wet season cyclonic storms give much more frequent and abundant rain, and the annual total rainfall is hence larger in amount and less variable in its distribution.

The annual rainfall averages 57·7 inches. It tends to decrease westwards and depends chiefly upon the position of the hill ranges in relation to the monsoon current. It increases slightly with elevation but is very uniform in amount over the greater part of the area, owing to the fact that a large portion of the fall occurs during cyclonic storms passing at a great height. The variability in the amount of the rainfall from year to year, is usually small over the larger portion of the area represented by the meteorological stations of Sambalpur, Chaibassa and Ranchi, in which it is only 65 per cent. It increases westwards and northwards from that area, and slightly exceeds 101 per cent. in the north-western districts, represented by Hoshangabad, Jabulpore and Seoni.

27. *Deccan.*—This includes the large area enclosed by the Ghats on the east and west, Mysore on the south, and the Central Provinces and Berar on the north. It is a plateau of moderate elevation, sloping gradually from west to east. The north-west portion, forming nearly half of the division, is covered with basaltic lava-flows (Deccan trap); the remainder is composed of granites, gneisses and schists with a basin of palaeozoic lime-stones, quartzites and igneous rocks in the Cuddapah area.

The dry season extends from December to May. The rainfall during this period averages 2·86 inches or 10 per cent. of the total of the year, mostly occurring during thunderstorms in April and May. The rainfall of the wet season is chiefly due to the West Coast humid current from June to August, but occasionally in September and almost entirely in October and November, it accompanies the course of storms coming up from the Bay of Bengal. The wet season is hence considerably longer than in the Konkan and usually lasts until the middle of November. The average rainfall is 29·68 inches, but it varies from 19·33 at Bellary to 51·16 at Belgaum, and in the greater part of the area is from 20 to 30 inches. Its variability is everywhere high (average 138) and ranges from 84 per cent. at Belgaum to 152 at Hanamconda and 190 at Sholapur. As the rainfall in the large area of the West Deccan is less than 30 inches, the dry zone of the division is very liable to drought and famine.

28. *Gujarat*.—This tract includes the British districts and State territory of Gujarat, Kathiawar and Cutch. Geologically it consists of flows of basaltic rock surrounded by a fringe of alluvium. Although by its position it forms part of the west coast of India, it is not cut off from the influence of the interior by the wall of the Ghats. Its climate, therefore, differs from that of the coast strip between the Western Ghats and the sea, and resembles that of Northern India in respect of the contrast between the dry and wet seasons, the great variability of the rainfall in the wet season and the almost entire absence of rain during the whole of the dry season.

The dry season, lasting from November to May, includes seven months. The normal rainfall of this period for the division is only 1·7 inch or about 2 per cent. of the total fall of the year. The rainy season begins suddenly and lasts for four months, from June to September. The average annual rainfall for the whole division is 27·6 inches, decreasing from 48 inches at Surat to 14·3 inches at Cutch. It varies greatly from year to year. The mean variability is 182 per cent., and the local figures range from 157 per cent. in Ahmedabad and Rajkot, to 204 per cent. in Deesa and 250 per cent. in Cutch. The air is comparatively dry except in the rains when the humidity is almost as great as on the west coast.

29. *The West Coast Division* comprises the area between the West Ghats and the Arabian Sea from the south of Surat to Cape Comorin and may be divided into two portions, *viz.*, the Konkan Coast between Bombay and Mangalore and the Malabar Coast between Mangalore and Trivandrum. Basaltic flows cover the northern end as far south as Vingorla; the rest of the division is made up of ancient crystalline rocks with a fringe of more recent formations on the Travancore Coast.

The dry season at Bombay extends from November to May, when it is brought to an abrupt termination by the sudden invasion of the south-west monsoon humid currents, usually in the first week of June. The total normal rainfall of Bombay during the period from November to May is only 1·33 inches, or less than 2 per cent. of the average total annual fall (74 inches). At Calicut, on the other hand, the dry season lasts only four months, from December to March, and is followed by a transitional period of heavy thunder-showers, apparently due to local sea winds and not to the influence of the south-east trades. The true monsoon commences in June with a wave of very squally weather and heavy rain from the Equator northward and eastward up the Arabian Sea. The mean rainfall for the division is 104·34 inches. It increases southwards from Bombay, with an average of 74 inches, to Karwar and Mangalore, where it slightly exceeds 120 inches, and thence decreases southwards to 114·5 inches at Cochin. It is always large in amount, but when a weak monsoon current causes drought in the Deccan, the rains cease prematurely on the west coast and the rice crop suffers. The variability ranges from 80 per cent. in Malabar to 102 per cent. in the Konkan Coast districts.

30. *South India* includes Mysore and the southern districts of the Madras Presidency, Salem, Coimbatore, Trichinopoly, Madurai and Tinnevely. Its geological formation consists of ancient crystalline rocks with gold-bearing schists at its north-eastern corner.

The meteorology of the tract is related to that of the Malabar Coast in the same manner as the meteorology of the Deccan is related to that of the Konkan Coast. But the wet season begins much earlier than in the Deccan and lasts longer, January, February and March being the only dry months in the year. It is ushered in by humid winds and thunder-storms arising on the west coast during May which forms a transition period of showery, rainy weather preliminary to the full burst of the monsoon. Like the Deccan, again, South India receives rain from the retreating monsoon current of the Bay of Bengal and from storms formed in the Bay which advance to the Coromandel Coast in November and December. The total annual rainfall averages 33·2 inches for the whole area, and varies considerably with position and elevation. It ranges between 39·8 inches at Salem and 21·5 inches at Coimbatore, where strong monsoon winds blow through the Pal Ghat gap, but bring little rain with them.

Owing to the fact that the division receives rain from both branches of the monsoon current, the variability in the annual rainfall is less than might be expected. The average is 91 per cent., and is slightly less than that of the

Konkan Coast districts (102). It is least at Trichinopoly and Coimbatore (about 70 per cent.) and greatest at Chitaldroog and Tinnevely (about 124 per cent.).

31. *The East Coast South Division* includes the districts of the Coromandel Coast southward from Nellore. The western and larger portion consists of ancient crystalline rocks, while the coast is fringed by recent sandstones and a few patches of cretaceous and Gondwana rocks.

The meteorology is in some respects peculiar. The dry season may be said to last from January to July but during this period the damp winds from the Bay give rise to frequent thunder-storms, accompanied by a rainfall of 9.64 inches, or 18 per cent. of the total rainfall of the year. The wet season begins in August and is fully established in October, when the monsoon recedes in the Bay of Bengal and is diverted towards the Coromandel Coast, where it produces frequent cyclonic storms. The rainfall of this and the two following months averages 33 inches or 64 per cent. of the year's supply. The total rainfall of the year averages 51 inches for the division. It increases considerably from Nellore 35 inches to Chitaldroog 53 inches, and decreases rather rapidly towards the interior so that at 100 miles from the sea there is from 25 to 40 per cent. less rain than on the coast. As might be expected from the cyclonic conditions which accompany and determine it, it is very irregular in its incidence. The average variability is 128 per cent., ranging from 146 per cent. at Nellore, where the rainfall is only 35 inches, to 115 at Negapatam.

32. *The East Coast North Division* includes the districts between the Eastern Ghats and the sea, from Balasore to the mouth of the Kistna. Geologically it is made up of ancient crystalline rocks (gneisses and schists) with small areas at the southern end of the division, and near the mouth of the Mahanadi covered by Gondwana coal-bearing rocks and alluvium.

The dry season in this area is similar in its characteristics to that of Bengal. The rainfall is very light from December to February and occurs chiefly in connection with the advance of cold weather storms across Northern India. As temperature rises in the interior the winds shift to south or south-west and thunder-storms give moderate rain in Orissa and Ganjam. The average rainfall from December to May is 6.64 inches or 13 per cent. of the year's supply. The south-west monsoon affects the northern and southern halves of the area very differently. The former is situated in the main tract of the current, and its rainfall is regular in proportion. The coast of the southern half, lying almost parallel to the direction of the south-west monsoon winds, is missed by the main current, and depends for its rainfall on cyclonic storms in the Bay of Bengal which turn further south and give more rain as the season advances.

The annual rainfall of the whole division averages 51.5 inches. It is largest in Orissa, where it averages about 65 inches, and decreases rapidly southwards to 44 inches at Gopalpur and to 40 inches from Vizagapatam to the mouths of the Kistna and Godavari. The variability of the rainfall increases from north to south. It ranges from 75 per cent. in Orissa to 140 per cent. in Vizagapatam and Coimbatore.

33. *Baluchistan* extends from the Sulaiman range on the east to the Persian frontier on the west, and from the southern limits of Afghanistan to the Arabian Sea. The hills are composed mainly of tertiary and cretaceous rocks; the lower levels are covered by wind-blown deposits. The meteorological conditions are similar to those of Persia and Afghanistan and the south-west monsoon exercises very slight influence. The mean yearly rainfall recorded at the three stations of Quetta, Chaman and Kalat is 8.7 inches. It ranges from 10 inches at Quetta to 7.5 inches at Chaman, and is very irregular in its occurrence, the measure of its variability being 161 per cent. No less than 86 per cent. of it falls during the winter months, the hot weather being very dry and almost rainless.

34. *The Burma Coast Division* is a narrow strip of low land fringing the coast with a background of hills rising to 3,000 or 4,000 feet, the height at which the damp monsoon winds yield the heaviest rainfall. The north-western portion consists of mesozoic and lower tertiary strata, which give place in the south and south-east to recent alluvial formations. The chief features of the meteorology of this area are the shortness and great humidity of the dry season, the length of the wet season, the accompanying heavy downpour of rain and the

excessive humidity of the air, which during the rains approaches continuous saturation.

The mean annual rainfall is nearly 153 inches, varying from 98 inches in Rangoon to 204 inches in Tavoy. It is unusually steady and regular. The mean variability of the division is only 45, ranging from 37 at Rangoon to 50 at Bassein. Cyclonic storms rarely occur in the south and there is no record of a storm wave having visited the delta of the Irrawaddy. The Arakan coast, however, is liable to cyclones of considerable intensity, and the low coast and islands have on several occasions suffered severely from storm waves.

35. *The Burma Wet Division* includes two areas, one to the north of Central Burma in which the meteorological conditions much resemble those of Assam and the other to the south of Central Burma in which the rainfall, temperature, etc., are intermediate in amount and intensity between the corresponding elements in the Burma coast and the Burma dry divisions. The north-western corner is covered principally by tertiary strata, which are bounded on the south-east by the southerly continuation of the older rock formation of Mandalay.

The southern half of the area is very dry from January to March, receiving only an average rainfall of a quarter of an inch. The northern districts obtain occasional rain, chiefly in connection with the cold weather storms of Northern India. The average total amount for the period, November to March, is about three inches. The rainfall increases rapidly in amount in May and June, and is heaviest in July and August during which period 43 per cent. of the rainfall of the year occurs. The annual average is 67 inches in the northern part and 59 in the southern. The rainfall is, on the whole, more variable in the southern than in the northern half, but the variability averages only 53 per cent. for the whole area.

36. *The Burma Dry Area* comprises the central districts of Upper Burma between the Chin Hills and the highlands of the Shan States. It is distinguished from the rest of Burma by its high temperature and great dryness in March and April, and by a comparatively scanty and uncertain rainfall. It bears the same relation to the Arakan coast districts, from which it is separated by the Arakan Yoma, that the dry zone of the Deccan does to the Konkan or west coast districts. The eastern surface of the division consists of palæozoic shales, lime-stones and sandstones, associated with the gneisses and schists of the Mandalay and Ruby Mines area: to the west these are covered by tertiary deposits and recent alluvium in the neighbourhood of the Chindwin and Irrawaddy rivers.

The distribution of the rainfall presents some peculiar features. From December to March the division is virtually rainless. Thunder-showers occur frequently in May, and the average rainfall due to this cause is then actually heavier than in July, the month of least and most uncertain rain in the division. Long breaks in the rains occur during July and August when the rainfall is steadiest and most copious in Northern India. On the other hand, there is a well-marked increase in September, when the rains are withdrawing from North-Western India, and September is in fact the month of heaviest and least variable rain in this area.

The annual rainfall in this dry area ranges between 20 and 36 inches and averages 32·65 inches. It is absolutely least in a small area of which Pagan is the centre. The variability of the rainfall is moderately large, averaging nearly 58 per cent. for the three representative stations, as contrasted with 53 per cent. for the Burma wet division and 45 for the Burma coast division. On rare occasions an unusually prolonged break in the rains or their premature conclusion may cause a partial failure of the crops.

Area, Population and Density.

Area of India
and main
Provinces.

37. According to the revised areas adopted in the Census of 1901* the Indian Empire contains 1,766,597 square miles of country, and is therefore greater by 12,100 square miles than the whole of Europe, excluding Russia Proper, Poland and Finland.* The provinces under British administration comprise 1,087,204 square miles or 61·5 per cent. of the whole, the aggregate area of the Native States being 679,393 square miles or 38·5 per cent. The largest British Provinces are

* For an explanation of the methods by which these areas have been determined, see Note (2) at the end of this chapter.

Burma (236,738 square miles), somewhat smaller than Austria-Hungary, Bengal (189,837) and Bombay (188,825), both a good deal larger than Sweden, and Madras (151,695), about the same size as Prussia and Denmark taken together. The smallest are Coorg (1,582), a little bigger than Brunswick, and Ajmer-Merwara (2,711), rather larger than Oldenburg. The Baluchistan Agency covers 132,315 square miles, or more than the Transvaal and Natal; Rajputana (127,541) is nearly as extensive; Hyderabad (82,698) is rather larger than Great Britain and Kashmir (80,900) rather smaller. The little State of Cochin (1,362 square miles) has almost exactly the same area as Saxo-Weimar, but contains more than twice as many people.

38 The population recorded on the night of 1st March 1901 was 294,361,056 persons of whom 231,899,507 were enumerated in British territory and 62,461,549 in the Native States. Native India, therefore, while embracing more than one-third of the area of the Empire, supports considerably less than a quarter of the population. By far the most populous Province is Bengal which contains nearly seventy-eight and a half millions of people. Next in order come the United Provinces of Agra and Oudh with forty-eight millions and a half, and Madras with nearly forty-two millions and a half. Bombay, now reduced by famine and disease to twenty-five and a half millions, and the Punjab, which has lost over two millions by the formation of the North-West Frontier Province and now stands at much the same figure as the Western Presidency, rank lowest among the large provinces and each have less than one-third of the population of Bengal. The above figures include the people of the States in political relations with the various Governments. If these were deducted, Bombay would show only eighteen millions of people, or less than a quarter of the population of British territory in Bengal. Of the Native States, Hyderabad comes first with a population somewhat exceeding eleven millions; the Rajputana group has nearly ten millions and the Central India Agency nearly nine. The Bombay States, a large and miscellaneous group, comprise nearly seven millions of people while Mysore has five millions and a half.

It is tedious to recite figures which are shown more clearly in tabular form. The brief description given above of the leading features of Table I, will convey a general idea of the extensive areas and the great masses of population with which a census of India is concerned. The principal facts are presented in a graphic form in the first diagram annexed to this Chapter which shows the area and population of each province and state, expressed as a percentage on the total area and population of the Empire. A glance at this diagram will show the varying relations which prevail between the size of a province or state and the number of persons who inhabit it and will lead up to the discussion of the density of the population and the causes upon which it depends.

39. If we distribute the population of India over the whole of the area included in the Empire, we find that on an average there are 167 persons to every square mile of surface. But a calculation of this kind tells us virtually nothing. The mean density of India is a mere arithmetical expression which covers an infinite variety of different conditions, and is of use mainly as an arbitrary standard or line of division in relation to which a large body of figures may be grouped and arranged. The following statement places the twenty Natural Divisions described above in the order of their density and shows the proportion of the total area which each comprises, the population which it supports and the meteorological conditions by which it is characterised. An attempt will be made to show that among the various factors which contribute to the complex problem of the distribution of the rural population in India, the amount of the rainfall and the regularity of the supply are, on the whole, the most important, and that where the influence of rainfall ceases that of irrigation begins :—

NATURAL DIVISION	Area in square miles	Per cent of total area	Population	Per cent of total population	Mean annual rainfall	Density per square mile	Mean annual rainfall	Remarks
			<i>(Above mean 167.)</i>					
Delta of Bengal	64,855	8.8	85,821,821	12.2	79.1	552.3	71.3	
Indo-Gangetic Plain, East	40,181	2.4	19,676,126	6.7	17.5	490.6	84.7	

NATURAL DIVISION	Area in square miles.	Per cent of total area	Population	Per cent of total population.	Mean annual rainfall	Density per square mile	Mean annual variability	REMARKS.
<i>(Above mean 167)—contd.</i>								
Himalaya and Sub-Himalaya, East.	75,810	4.4	26,193,928	12.8	71.9	477.4	108.3	
Indo-Gangetic Plain, West	73,459	4.5	30,069,771	10.2	30.9	409.3	130.3	
East Coast, South	28,180	1.6	10,121,090	3.4	48.0	359.1	128.0	
West Coast	36,265	2.1	12,125,619	4.1	104.3	334.4	94.2	
South India	64,613	3.8	16,773,659	5.7	33.2	259.6	94.2	
East Coast, North	70,037	4.1	16,041,949	5.5	51.5	229.0	105.4	
TOTAL OR MEAN	453,403	26.5	176,823,966	60.1	58.3	389.9	102.0	
<i>(Below mean 167.)</i>								
Deccan	155,177	9.1	23,441,579	8.0	29.7	151.1	138.0	
West Satpuras	43,798	2.6	6,461,884	2.2	39.1	147.5	127.3	
Gujarat	66,936	3.9	9,108,799	3.1	27.6	136.1	181.8	
Central India Plateau	130,789	7.7	16,053,539	5.5	34.6	122.7	127.5	
Himalaya and Sub-Himalaya, West	142,739	8.4	17,339,782	5.9	50.4	121.5	101.0	
East Satpuras	152,455	8.9	16,759,028	5.7	57.7	109.9	91.0	
Brahmaputra Valley	36,520	2.1	3,062,003	1.0	92.3	88.8	64.2	
Burma, Dry Area	38,617	2.3	3,054,936	1.0	32.6	79.1	88.0	
North-West Dry Area	201,972	11.8	13,563,310	4.6	11.4	67.1	194.8	
Burma, Coast	61,097	3.6	3,860,038	1.3	152.0	63.2	45.1	
Burma, Wet	147,535	8.6	3,942,549	1.3	64.3	26.7	58.3	
Baluchistan	76,977	4.5	810,746	3	8.7	11.0	161.0	Mean (less Burma and Assam) 32.4
TOTAL OR MEAN	1,254,612	73.5	117,458,103	39.9	50.1	93.6	114.4	

Note.—The area (1,708,616) and population (194,231,159) according to the above statement are less than those shown in Table I owing to the omission of the unenumerated portion of Baluchistan and also of Aden, the Andamans and the Laccadives which are not included in the scheme of natural divisions.

Areas of high density. ••

40. We may take the map of the natural divisions of India, on which density is shown by an arrangement of lines, irrigated areas being marked in green, and the mean rainfall of each division entered in figures. The first feature to catch the eye is the great tract of thickly peopled country, including four natural divisions, which stretches from the Bay of Bengal almost to the valley of the Indus. In the three eastern divisions the correspondence between density and rainfall is complete. The Delta of Bengal has a rainfall of nearly 80 inches and a population of 552 persons to the square mile; in the Indo-Gangetic Plain, East, the rainfall is 48 inches and the mean density 490 per square mile; while in the Eastern Himalaya and Sub-Himalaya, the fact that a higher rainfall is accompanied by a slightly lower density (477 per square mile) is amply accounted for by the inclusion of the hills where the culturable area is comparatively small and the population more scattered. But in the western portion of the Indo-Gangetic Plain the two sets of facts, rainfall and density, do not vary in unison. The former drops to 31 inches while the latter is maintained at 409 per square mile. How comes it that a supply of rain which in the Deccan suffices for only 150 persons to the square mile, can support more than double that number in Hindustan and the Punjab? The apparent miracle is wrought by irrigation. The Indo-Gangetic Plain, West, is the chief irrigation area in India, where a network of deftly aligned canals, supplied by snow-fed rivers independent of the monsoon, has secured some twelve million acres of land from the risk of a failure of the crops. A glance at the next division will serve to mark the contrast. In the Western Himalaya and Sub-Himalaya the rainfall is heavier by nearly 20 inches than in the Indo-Gangetic Plain, but it is uncertain in its incidence; only a small portion of the tract is susceptible of irrigation; and the

culturable area is necessarily limited. Under these circumstances 122 persons to the square mile is perhaps as much as can be expected.

We have seen that the maximum densities occur in the alluvial plains of Northern India, and that, as a general rule, the higher the rainfall the more people there are to the square mile. Where the rainfall dwindles a high rate of density can only be maintained by the help of canal irrigation. Where the rainfall is uncertain and the culturable area small, population is bound to be sparse.

41. The areas of minimum density lie at the extreme ends of the Empire,—Areas of low density, Western Frontier Baluchistan, Sind and Rajputana on the west, Burma and the Brahmaputra Valley on the east. In the western tracts the influence of rainfall is predominant. Baluchistan, with a mean rainfall of 9 inches, has eleven persons to the square mile or little more than one person for every inch of rain; in the North-West Dry Area 11 inches of rain support a population of 67 per square mile. In both cases not only is the amount of rain small but it varies very greatly from year to year. Here, again, wherever irrigation comes in, the conditions are at once transformed, and one may almost surmise that were it not for the Indus floods and the canals which store the precious overflow, the mean density of Sind would hardly exceed that of the cultivable portion of Baluchistan. Take for example the five districts of Sind and the State of Khairpur. Shikarpur, with a million acres under irrigation, has a density of 125 to the square mile. Hyderabad with an irrigated area of 846,000 acres supports 112 persons per square mile. On the other hand, Karachi, Thar and Parkar and the Upper Sind Frontier where the irrigated tracts are much smaller show densities of 35, 27 and 89 respectively; while in Khairpur, where there is no irrigation at all, the density is only 33. The dependence of population on water, whether supplied by the monsoon or by the Irrigation Department, could hardly be more clearly brought out.

42. The Province of Assam, occupying the north-eastern corner of the Empire, has on an average 109 persons to the square mile. In the three natural divisions the density varies from 353 in the Surma Valley to 108 in the Brahmaputra Valley, and 27 in the hill districts, while of particular districts Sylhet has 412 persons to the square mile, and the Lushai Hills only 11. The causes of these variations are partly natural and partly historical. The fertile ice-plain of Sylhet, with a damp but not unhealthy climate and a steady and copious rainfall, forms part of the delta of Bengal,—one of the most populous tracts in India. The hills, on the other hand, are covered with thick forest, cultivation is laborious and the growth of population slow. The indigenous tribes, such as Nagas and Khasias, cling, for the most part, to the higher levels and shun the malarious jungles of the lower hills, where only acclimatised races of Bodo origin like the Garo and Mech, can venture to settle with impunity. The causes of the scanty population of the Brahmaputra Valley are, as Mr. Gait pointed out in 1891, mainly historical. The fanatical Moamaria insurrection in the 18th century, and the ruthless methods by which it was suppressed, the Burmese invasion of less than a hundred years ago, which left the country at the time of our occupation almost denuded of inhabitants, ceaseless minor raids of which no complete record survives: all these misfortunes have left their mark on the Assam Valley and have contributed to that decline of the Assamese population to which the statistics bear witness. That the vacuum thus created has not been filled by the natural inflow of immigrant cultivators may be due in part to the conformation of the surface, which does not lend itself to rice cultivation on the same scale as Bengal; to the comparative poverty of the soil; to imperfect means of communication, to the prevalence of the virulent and infectious form of malarial fever known as *Kalá-ázár*, and to the vague dread of Assam which prevails generally in Bengal and manifests itself in the fact that the only people who go to Assam are either residents of the adjacent districts of Rangpur, Mymensingh and Hill Tippera, or tea coolies imported under the Labour Act. The former are more or less acclimatized; the latter are too poor and too ignorant to have much choice in the first instance, though they prosper greatly in their new home and many of them settle there for good.

43. The network of rugged hills, stony plateaux, and wastes of wind-blown sand, interlaced here and there with narrow stretches of cultivable soil, which forms the Baluchistan Agency, has, as its physical conditions imply, the scantiest population of any portion of the Indian Empire. Taking Mr. Hughes-Buller's

estimate of one million and fifty thousand persons for the entire Agency, the mean density works out to eight persons per square mile, while for the area actually enumerated by various methods in the census the corresponding figure is 11.

"The incidence of population per square mile in the different areas of the Agency varies very largely. The heaviest population per square mile is to be found in Quetta-Pishin with its large urban population and well irrigated tracts. Here we have 22 persons per square mile, whilst in Chagai and the Bolan there are only two persons per square mile. In the 'Agency' figures vary from 15 persons per square mile in Kalat to five persons in the Marri and Bugti country."

Bengal

44. The great Province of Bengal contains portions of five of the major natural divisions of India—the Delta of Bengal, the Himalaya and Sub-Himalaya East, the Indo-Gangetic Plain East, the East Satpuras and the East Coast North. In the Provincial Report the following scheme of Natural Divisions has been adopted:—

- (1) West Bengal.—The Burdwan Division.
- (2) Central Bengal.—The Presidency Division excluding Khulna.
- (3) North Bengal.—The Rajshahi Division, Malda, Kuch Bihar and Sikkim.
- (4) East Bengal.—The Dacca and Chittagong Divisions, Khulna and Hill Tippera.
- (5) North Bihar.—Muzaffarpur, Darbhanga, Champaran, Saran, Bhagalpur, Purnea.
- (6) South Bihar.—Patna, Gaya, Shahabad, Monghyr.
- (7) Orissa.—The Orissa Division, excluding Angul.
- (8) Chota Nagpur plateau.—The Chota Nagpur Division, the Sonthal Parganas, Angul and the Tributary States of Orissa and Chota Nagpur.

Mr Gait's arrangement brings out some local distinctions which are too minute to be noticed in the Imperial scheme *

Bengal as a whole has on an average 413 persons to the square mile. The highest density (636) is found in the alluvial plains of North Bihar, and the lowest (152) among the gneiss hills and undulating sandstones of the Chota Nagpur Plateau. Between these extremes the other natural divisions follow an order dependent in the main on their comparative fertility. Central Bengal has 608 persons to the square mile; West Bengal, which contains the populous districts of Hooghly and Howrah, 591; East Bengal 514; South Bihar 511; and the coast strip of Orissa 508; while North Bengal, which is traversed by the sparsely populated semi-laterite formation known as the Barind, drops to 483, the lowest density in the plains of the delta. The most thickly peopled district is Howrah, where the attraction of lucrative employment in the jute mills has raised the mean density of the entire area to 1,668 persons per square mile, and that in rural areas, excluding the city of Howrah and the municipality of Bally, to 1,351. Jute cultivation does for Dacca what jute manufacture does for Howrah; a soil enriched by perennial silt and watered by an unfailing rainfall supports 923 persons per square mile, or, if Dacca city is taken into account, 952. Muzaffarpur, the country of the petty proprietor who clings to the soil at the cost of endless sub-division of property, has a density of 917, and Saran of 907. "The scantiest population is found on the outskirts of the Province in Changbhakar and Korea to the west, Sikkim to the north, and the Chittagong Hill Tracts to the east; in none of these does the density exceed 23 to the square mile."

Berar

45. The average density per square mile in Berar is 155, ranging from 114 in Ellichpur to 228 in Amraoti. The figure for Ellichpur is, however, reduced by the inclusion of the Melghat taluk, a forest tract in the Gawilgarh Hills with only 22 persons to the square mile. For the rest of the district the mean density is 268. The southern districts of the Province which are traversed by the Ajanta or Indhyadri range have the lowest density, but Berar as a whole is fairly homogeneous, and the local variations hardly call for remark.

* East, Central and part of West, Bengal lie in the Imperial Natural Division described above as the "Delta of Bengal", North Bengal and North Bihar are included in the "Himalaya and sub-Himalaya East" South Bihar including the Sonthal Parganas, and part of West Bengal in the "Indo-Gangetic Plain East" and Chota-Nagpur with its Tributary States in the "East Satpuras"

46. In the Imperial scheme of natural divisions the Bombay Presidency is distributed between the North-West Dry Area, Gujarat, the West Satpuras, the Deccan and the West Coast. From the Provincial point of view this arrangement is open to certain patent objections. Sind and Gujarat indeed fall into their proper places in the first two groups, but as we travel southward difficulties of classification arise which could only be got over by the inconvenient device of breaking up districts and putting parts of the same district into different natural divisions. From Gujarat to the borders of Madras the great barrier of the Ghats running nearly parallel to the coast cuts through a series of districts and gives rise to widely different climatic conditions. The coast talukas situated on the west of the hills have a rainfall of over 100 inches, the Deccan tract to the east receives the bare 80 inches which escapes the influence of the monsoon. In view of these anomalies Mr. Enthoven has departed entirely from the system of grouping adopted on former occasions. He gives, however, an excellent description of the five natural divisions then recognized.

"In its northern province, Sind, the lower valley of the Indus, the Presidency possesses a tract of country entirely dependent on irrigation. Where the soil is not fertilised by the life-giving waters of the river, its aspect is that of a sandy desert, a dreary plain broken only by an occasional line of sand hills. Much of the province, therefore, is at present unfit for human habitation, and the population that it supports is only 68 to the square mile. South of Sind, between the Feudatory States bordering on Rajputana and the sea, the fertile and well cultivated plains of Gujarat stretch southwards to the Konkan. This is the 'garden of the Presidency' yielding a succession of abundant crops, and supporting out of its plenty a population of 267 to the square mile. The rest of the Presidency falls into three other natural divisions. Below the wall of the Ghats which run in a continuous chain from Gujarat to the south of Kanara, where Bombay touches Mysore and Madras, a coast line of rice-bearing areas, sure of a regular rainfall in the first contact with the south-west monsoon, entertain a well distributed population of 221 to the square mile. The Deccan table-land, protected by the hills from the onset of the monsoon, which often surmounts their crest only to hurl its heavy clouds across the continent, and to leave the plains unwatered and untilled, with difficulty maintains 159 where Gujarat provides for nearly twice that number. In the extreme south of the Presidency, above the Ghat line, a favoured tract known as the Karnatak, more fortunate than the arid plains of the Deccan, finds support for an average population of 190 to the square mile with little risk of crop failure in the greater part of its well watered valleys."

Having sketched the natural aspects of the country as fully as the circumstances admit, he points out the objections to ignoring administrative units, and groups districts in all his tables by the four Commissionerships of which they form part for executive purposes. In both classes of units the density of population shows great variations. Sind has only 68 persons to the square mile, while the Northern Division has 258, and the Central Division 159. Kaira in Gujarat, though much reduced by famine, is still the most populous district in Bombay, with 449 persons to the square mile, while at the other end of the scale the district of Thar and Parkar in Sind has only 27. In native territory the most thickly peopled State is Kolhapur, which is favourably situated as regards rainfall and has 319 persons to the square mile, while population is scantiest in the jungle covered hills of the Khandesh Agency where there are only 20. Cutch has only 84 people to the square mile, even fewer than Sind, and Kathiawar with 112 is considerably below the standard of the British districts of Gujarat.

47. Burma in its largest sense, including the Shan States and Chin Hills, has a mean density of 44 persons per square mile, which rises to 55 if these sparsely peopled areas are left out of account. Of the four divisions adopted in the Provincial report the sub-deltaic tract of Lower Burma lying round Prome has 90 persons to the square mile. The dry zone of Upper Burma, with its centre about Mandalay, comes next with density of 79. Then follows the coast strip, from the Mandalay Peninsula to the borders of Chittagong, with 55; and last of all comes the wet tract of Upper Burma which shows only 15 persons to the square mile. Among districts the highest density is found in Herzada (169), Hanthawaddy (160) and Sagaing (152), and the lowest in the Pakokku

(Chin Hills (5), Northern Arakan (4) and Myitkyina (6) These variations defy any cut-and-dried formula. In Burma, as Mr. Lewis observes, "the conditions vary so largely that a rough-and-ready classification of areas according to rainfall is exceedingly difficult. The dry districts are, as a rule, open, level and accessible; the wet are frequently the same; as often as not, however, they are hilly, remote and ill-adapted for cultivation. Mergui has a rainfall of over 150 inches and a density of nine inhabitants per square mile, Sagaing a rainfall of less than 50 inches and a density of 152 per square mile. No one would, in the case of a tropical or sub-tropical region, venture to lay down as an axiom that a light monsoon meant a dense, and heavy rains, a sparse, population, yet, as will be seen below, this is precisely the inference that would be drawn from a comparison in Upper Burma of the rainfall figures with the density of the population. The fact is that in Burma the one universal rule is for the uplands to be thinly peopled, and the plains, whether wet or dry, thickly, and the only satisfactory division of the country for our purpose would be into high and low land. It would, however, be impossible to embody this distinction in any formal scheme of district classification, and, as it is indubitable that, *ceteris paribus*, the more abundant the rains in a country like Burma, the richer the paddy crops and the larger the host of husbandmen, there seems on the whole to be no better system of classification than one which gives the first place to meteorological considerations." An examination of Subsidiary Table I A in the Provincial Report shows that during the last ten years the increase in density has been greatest in the coast and sub-deltaic districts where the rainfall is heaviest, and it may be expected that this tendency will continue as the country is opened up, so that the gradations of density in Burma will come to correspond more closely with the gradations of rainfall.

Central
Provinces

48. The mean density of the Central Provinces now stands at 102 persons per square mile. This figure covers variations ranging from 23 in the forest-clad hills of Bastar to 170 in the rice-growing plains of Chhattisgarh. The Nagpur country has 161 persons to the square mile, the Nerbudda valley 145, the Vindhya plateau 114 and the districts of the Satpura range 78. If we exclude Bastar and some of the jungle tracts, the range of variation is not very great, and corresponds fairly well to the distribution of the Province for the purposes of this report between the East Satpuras, the West Satpuras and the Central India Plateau. For the Provincial Report a series of 12 smaller divisions has been adopted which brings out differences of physical conformation, history and ethnical constitution which are of interest from the local point of view. In commenting on the statistics of density Mr. Russell observes: "Rice districts generally appear to support a higher specific population than spring crop districts, the cultivated area per head of population being about an acre and a half in the south and east of the Provinces as against two acres in the northern districts. The average outturn of rice per acre is taken as 1,080 lbs. uncleaned, 650 lbs. cleaned, while that of wheat is 570 lbs. and of jua 570 lbs. But it is believed that rice-eaters require a larger quantity of the uncooked grain than consumers of wheat. There is a proverb, 'Wheat will take you there and back; kichri will take you there; if you have only got rice don't start on a journey.'" It may be added that the possibility of growing rice is mainly dependent on rainfall. Given sufficient rain, backed up by the industry requisite to carve a hill-side into a series of terraces which will hold water, and it is difficult to say where rice cannot be grown. On the whole, then, we may say that the determining factor of density in the Central Provinces is the rainfall, modified by the effect of the various ranges of hills which reduce the area available for cultivation and divert the rain-bearing winds.

Madras

49. The Madras Presidency contains portions of five of the natural divisions described above. For provincial purposes these have been modified, so as to bring them into agreement with the linguistic distinctions characteristic of the south of India. The following five divisions have thus been formed:—

The Agency Division, consisting of forest-clad ranges which form the background of the districts of Ganjam, Vizagapatam and Godavari, is described by Mr. Francis "as a sparsely peopled tract inhabited largely by Animistic tribes, which speak languages peculiar to themselves, live mainly in very small villages, scarcely ever leave their own country, depend almost entirely upon agriculture, and are almost wholly illiterate. It contains no railways and hardly any roads."

The districts of the Deccan Division with a rainfall always under 30 inches and sometimes under 25 are mostly infertile and seldom irrigable; the scanty population is mainly agricultural and increases but slowly.

"The East Coast Division possesses two large irrigated areas in the deltas of the Godavari and Kistna rivers, and has a rainfall which averages between 30 and 40 inches. * * * It is essentially the land of the Telugus."

"The Southern Division is the country of the Tamils, of the Hindus and of the Native Christians. Its rainfall averages on the whole nearer 40 than 30 inches annually, it includes the fertile irrigated delta of the Cauvery river and the area commanded by the Periyar irrigation scheme, and it contains three of the richest districts in the Presidency."

"The West Coast Division differs as much from the last three as the Agencies do, but in entirely different respects. The Western Ghats behind it check the south-west monsoon and bring down on the whole division the moisture which that current carries. The rainfall is consequently over 100 inches everywhere, and in places it is five and six times as heavy as on the other coast. Thus three wet crops a year on unirrigated land are a common occurrence; the Division is very rich, and it has a denser population and a larger proportion of literate persons than any other. Cut off as it is by these hills from the rest of the Presidency, immigrants to it are rare, and its people are stay-at-home folk. They are, moreover, different from those of the other divisions in language (Malayalam, Tulu and Canarese being their principal vernaculars), in appearance, in dress, in customs, and even in their laws of inheritance."

For the Presidency as a whole the average number of persons per square mile is 270. The sparsest population is found in the Agency tract (69 per square mile) and the Deccan (139), and the densest on the West Coast (368). The East Coast Division has 303 persons to the square mile and the South Coast 358. In districts the density varies from 605 in Tanjore to 142 in Anantapur. These differences are readily accounted for by the climatic and physical conditions described above.

50 Taking the Punjab and the North-West Frontier Province together, and excluding the population enumerated in the Malakand, Dir, Swat and Chitral, in the Baluch trans-frontier area, and in the Shirani country, the average number of persons to the square mile is 180.5. British territory in the Punjab has a density of 208.9; the Frontier Province by itself 140.7 and the States of 121.1. Of the natural divisions the Indo-Gangetic Plain West has 315.8 persons to the square mile; the Sub-Himalayan tract 300.2; the North-West Dry Area 97; and the Himalayan area only 76.7. In British territory the density ranges from 641 in Jullundur and 639 in Amritsar to 54.3 in Mianwali, and 42 in the Kurram valley. The Chenab Colony, a desert transformed by irrigation into a garden, has already 213.6 persons to the square mile, a denser population than 12 out of the 27 districts in the Punjab as now constituted. Speaking generally, we may say that in the plains the density is dependent on rainfall and irrigation, in the hills on the amount of land that admits of cultivation.

51. The average number of persons to the square mile in the United Provinces is 432, viz., 445 in British territory and 158 in the two Native States. Mr. Burn divides the total area into eight natural divisions. The Himalaya West, i.e., the mountainous tract in the north, only supports 87 people to the square mile. In the south the Central India plateau, or British Bundelkhand, and the East Satpuras, or the Mirzapur district, have a density of 202 and 207 respectively. The other natural divisions exhibit a continuous increase in density from west to east. The Western Sub-Himalayan districts support 441 persons to the square mile and the Eastern, 566; in the Gangetic plain 546 are found in the western portion, 577 in the central, and 751 in the eastern. Coming to individual districts, and excluding cities, "we have 12 with a density of less than 400, 14 between 400 and 500, and 22 with a higher density. The most densely populated district is Ballia in the extreme east, which supports 791 persons to each square mile of area."

52. Excluding Baroda City, the mean density of Baroda State is 228 persons per square mile, ranging from 288 on the fertile black soil of the Baroda Division to 139 in Amreli where the rainfall is scanty, the land poor, and part of the area is occupied by low hills.

In the Imperial scheme of natural divisions, Central India is distributed

between the Central India Plateau, the East Satpuras and the Indo-Gangetic Plain West. The Provincial Superintendent of Census has adopted a grouping by three divisions :—“the Highlands of the Malwa Plateau, with a mean elevation of some 1,500 feet above sea-level; the low-lying country some 600 feet above sea-level, comprising the greater part of the eastern section of the Agency; and the hilly tracts which lie mostly to the south.” The last of these includes the portions of the Vindhya, Satpura and Kaimur ranges which form the south of the Agency, a forest country with scanty patches of comparatively infertile soil. In the Agency as a whole there are 109·5 persons to the square mile. The low country, where the cultivable area is largest and well irrigation is more freely resorted to, supports the largest population—172·5 to the square mile; the plateau, with a fertile soil growing opium, cotton and wheat, but much cut up by hills and ravines, has a density of 102, while in the hill tracts there are only 74 persons to the square mile.

Kashmir and
Mysore

53. The Kashmir State is one of the most sparsely populated tracts in India. Its area is 51,000 square miles or fourteen times as great as that of Travancore, but the population is slightly less than that of the latter State, and the density per square mile is only 36. The areas are too uncertain for it to be possible to compare one part with another but the most populous tracts appear to lie in Jammu Khas and Bhimbar on the Punjab frontier.

Mysore naturally divides itself into the *Malnad*, or hilly country sloping down from the Western Ghats, and the *Maidán*, or open country to the east. The former, though it enjoys a temperate climate and a heavy rainfall, has a physical configuration which makes it unfit in many parts for ordinary cultivation. In the *Maidán* on the other hand the soil is fertile, and in the south and west large areas are irrigated from tanks and streams. For administrative purposes the State is divided into two divisions—Eastern and Western—which do not wholly correspond to the natural line of cleavage. The Western division, which contains not only the *Malnad* but also a portion of the *Maidán*, has a mean density of 154 persons to the square mile, but in the *Malnad* portion, in spite of numerous coffee plantations, it is only 124 against 188 in the *Maidán*. The Eastern division, which is wholly *Maidán*, has a density of 200, or 190 if the cities which it contains be excluded.

Hyderabad
and
Rajputana

54. The present density of the State of Hyderabad is 135 persons to the square mile or, if the city itself be excluded, 129. The eastern and southern divisions of the State with a higher rainfall and a more fertile soil have the highest mean density and show the least decrease in this respect during the last ten years. Among the districts Bidar (184) is the most populous, while Sirpur Tandar has only 54 persons to the square mile.

More than half of Rajputana is situated in the North-West Dry Area on the north-western side of the Aravalli hills. The remainder is included in the Central India Plateau, with the exception of the States of Alwar, Bharatpur (Bharatpore) and Dholpur, which form part of the Indo-Gangetic Plain West. For the purposes of his own report Captain Bannerman has grouped the States of the Agency into three divisions—Western, Eastern and Southern. The entire Agency has, on an average, 76 persons to the square mile; 35 in the sandy plains of the western division, 79 in the more fertile but broken and forest-clad country of the south, and 165 in the eastern division which is watered by several rivers and has a fair rainfall and a good soil. The most densely peopled State is Bharatpur, bordering on the Jumna, with 316 persons to the square mile, and the lowest density, five to the square mile, is recorded in the almost rainless deserts of Jaisalmer. Throughout Rajputana the relation between rainfall and population seems to be singularly close.

Cochin and
Travancore

55. The little State of Cochin, with an area of 1,362 square miles, or less than most British districts, is enabled by its fertile soil and its copious and regular rainfall to support 596 persons per square mile, while one of the taluks on the coast has the phenomenal density of 1,920. The lowest density (814) is found in Chittur, which contains a large area of forest and has a rainfall of only 65 inches. The bulk of the population is massed in the coast taluks which have a mean density of 1,628 persons to the square mile, while in the forest taluks, the corresponding figure is 457. If the area occupied by lagoons is deducted, the density of the coast taluks of Cochin rises to 1,828 persons per square mile. The statistics justify Mr. Sankara Menon's description of Cochin as “one of the

densely peopled tracts in the world, maintaining its population in a fair degree of competence, and having some margin still for a further growth of population."

Travancore, which, like, Cochin, lies in the West Coast Division, has a population of nearly three millions and a density of 416 persons to the square mile. It is divided in the Provincial Report into two parts, the Western, which is littoral and deltaic, with 944 persons to the square mile, or 886 if the urban population be excluded, and the Eastern, which is mountainous and sub-montane and has only 238.

Towns and Villages.

56. The definition of a town given in the Imperial Census Code was as follows:—

Town includes—

- (1) Every municipality of whatever size.
- (2) All civil lines not included within municipal limits
- (3) Every cantonment.
- (4) Every other continuous collection of houses, permanently inhabited by not less than 5,000 persons, which the Provincial Superintendent may decide to treat as a town for census purposes.

The definition was practically the same as that adopted in 1891, but there have been some differences in its application owing to the latitude allowed to the Provincial Superintendents in respect of places with a population exceeding 5,000 persons but not under the operation of the law relating to municipalities. In some provinces, *e.g.*, in Burma, all such places have been treated as towns, while in others, *e.g.*, in Madras, this has not been done unless they appeared to possess a truly urban character. Sometimes, again, as in Baluchistan and, in a few instances, in Bengal, places which are not municipalities and which have less than 5,000 inhabitants have been classed as towns for special reasons.

Many of the places which have thus been treated as towns are in reality nothing more than overgrown villages, but it would have been impossible to frame any definition, with the object of excluding such places, without destroying all prospect of uniformity in its application in different parts of India, and even in different parts of the same Province. Most, if not all, Indian Municipal enactments contain a provision that a certain proportion of the inhabitants of any area which it may be proposed to bring under their operation must earn a livelihood by non-agricultural occupations, and it was clearly better to take the circumstance that this condition has been found to exist as the main test of what constitutes a town, rather than to attempt to introduce a new standard that could not be applied correctly without far more elaborate enquiries than it would have been possible to carry out. In the following notes on the distribution of the population between towns and villages it must therefore be borne in mind that the classification is only a rough one, and that in all cases the true urban population is considerably below that indicated by the proportions calculated on the results of the Census. The characteristics of the true urban population and its tendency to grow or decline will be more clearly seen from a consideration of the statistics for cities to which attention will be invited further on.

57. Nearly three-fourths of the people of Ajmer-Merwara (73·7) live in villages and 26 per cent. are collected in the ancient and prosperous city of Ajmer, the cantonment of Nasirabad, the small municipality of Kekri, and the important cotton mart of Beawar in Merwara founded by Colonel Dixon in 1835. Of the villages 32 per cent. have less than 500 inhabitants; 41 per cent. between 500 and 2,000; 22·5 per cent. from two to five thousand, and 2 per cent. over five thousand. In Ajmer the villages are large and contain on an average 621 persons against 278 in Merwara, where more than half of the rural population lives in villages with less than 500 inhabitants. The difference is probably due to historical reasons. The comparatively open country of Ajmer was swept by the march of armies struggling to win the commanding position of Ajmer city and the fort of Taragarh, and the people were driven to congregate in large villages, while the tide of battle left the hills of Merwara undisturbed.

58. Assam is the type of a rural Province. Ninety-seven per cent. of the people live in villages, and only three per cent. in towns, and even this latter proportion falls to two per cent. if Imphal the capital of Manipur is excluded from the calculation. Imphal, indeed, in spite of its population of 67,000, is nothing but

an overgrown village which has sprung up round the palace of the Raja. More than half of the working males are cultivators, and the place has none of the characteristics of urban life. The same may be said of the decaying towns of Sylhet (13,893), and Gauhati (11,661) once the capital of the Kachari Kings and of the Viceroy of the Ahom Rajas, and now the terminus of the Assam branch of the Assam-Bengal Railway. Dibrugarh (11,227) and Silchar (9,256) owe such petty business as they possess to the demands of the neighbouring tea gardens. Shillong (8,384) is the headquarters of the Local Administration; Barpeta (8,747), the sacred place of the Mahapurushia sect of Vaishnavas, has been hable to periodical inundation ever since the earthquake of 1897, and its population is declining. The Province has no manufactures worth mentioning; Assamese sloth-leaves trade and handicrafts to the foreigner, and, as Mr. Allen effectively points out, "tea which is the one industry in which capital has been invested, tends to prevent the growth of towns, each large garden forming a centre in itself with its own Kayah who acts as general merchant and money-lender, and, if possible, its own market, where the coolies can obtain their supplies from the neighbouring villages." Subsidiary Table IV shows that 57 per cent of the rural population live in villages containing less than 500 persons; 38 per cent in villages of from 500 to 2,000 inhabitants, and less than 5 per cent in the larger villages of from two to five thousand residents. Little interest attaches to these figures. The only villages in the structural sense of the word in Assam are to be found in the Lushai and Naga Hills and in North Cachar where raiding for heads or women has driven the clans to seek safety each in its own stockade. In the plains what is called a village is a number of isolated bamboo clumps with huts nestling inside them, which were grouped together in the cadastral survey or happened somehow to have acquired a separate name. The connexion between one clump of bamboos and another is thus either arbitrary or accidental, and the statistics are practically meaningless.

Baluchistan

59. The rural population forms 95 per cent. of the population of Baluchistan, or nearly the same proportion as in Assam. Pastoral nomadism in the one leads to the same result as settled agriculture in the other. Forty-four per cent. of the people enumerated in the Census are returned as nomadic, the proportion varying from 14 per cent. in British and Administered territory to 63 per cent. in the Agency Tracts. Other causes come in to complete the parallel or contrast with Assam. The warlike Baluch and Bráhui are as slothful as the timid Assamese; commerce they despise; industrial activity is uncongenial to them, and they have the strongest aversion to the crowded and expensive life of a town. Hence the urban population is mainly composed of traders from India or Afghanistan, and clerks, menials and followers dependent on the British garrison. The nomadic tendencies of the people, vividly depicted by Mr. Hughes-Buller in the first chapter of his report, are also reflected in the statistics of villages. Not only are these few in number (2,054 in the whole of Baluchistan or one for every 37 square miles) but their size is small and 91 per cent of them contain less than 500 inhabitants. We have seen that 44 per cent. of the total population is nomadic; of the balance, 29 per cent. live in the smallest class of villages; and 11 per cent. in villages of less than a thousand persons; leaving some 10 per cent. for the larger places with from a thousand to five thousand residents. Throughout Baluchistan cultivation depends so entirely upon water that rain-crop cultivation (Khushk-aba) is deemed too uncertain to be assessed. Water can only be obtained by underground channels (Karez) fed from the springs in the hills which again depend largely on the winter storms. A short snowfall in the winter means dry Karezes in the summer. In any case a village cannot outgrow its water-supply, nor can the supply be easily increased. The excess population must wander off to seek irrigable land and fresh pastures elsewhere. The nomadic instinct impressed upon the people by the climate and conformation of Baluchistan is subject, however, to certain marked exceptions where extremes of climate make it impossible to live in tents, permanent mud huts are built; where regular irrigation is possible, the nomad is ready enough to settle down and cultivate, as the Baluch did under General Jacob some seventy years ago and the Marri and Bugti tribes are anxious to do now, if only irrigable land could be found for them. A third motive, the need of protection, which led people in old days to congregate behind walls and in the neighbourhood of towers of refuge has lost its force since

the country was pacified, and Mr. Hughes-Buller describes how these strongholds are now being deserted in favour of temporary huts which can be moved when fodder has been exhausted or a site has become inconveniently polluted.

60. "In the province as a whole," says Mr. Gait, "out of every hundred ^{Bengal.} persons, 95 live in villages and only 5 in towns. Bengal is a distinctly agricultural country, and many even of the so-called towns are merely overgrown villages. The urban population is considerable only in Central Bengal, where the inclusion of Calcutta and its environs brings the proportion in question up to 19 per cent. If they be excluded, it is only a little more than 7 per cent. The second place is shared by West Bengal with its flourishing industrial centres at Howrah, Bally, Serampore and Raniganj, and South Bihar with its ancient towns of Patna, Gaya and Bihar; in both these tracts 7 per cent. of the inhabitants live in urban areas. Orissa follows with an urban population of 4 per cent., then North Bihar and North Bengal with three per cent. and lastly East Bengal and the Chota Nagpur Plateau with only two per cent. The order in which the different tracts stand is sufficient to show the want of any connection between the prosperity of the people and the growth of towns. The general standard of comfort is highest in Eastern Bengal, although it has the smallest proportion of persons living in towns. South Bihar ranks comparatively high in this respect, and yet it includes the poorest part of the province. The older towns, which usually owed their origin to the presence of a native court and its entourage, have few industries, and such as they possess are for the most part decadent, while in the newer towns the industries are carried on by foreign capital, and even the employes come from other parts of the country. The mills of Howrah and the coal mines of Asansol are alike worked with British capital by coolies from Bihar and the United Provinces, and the shop keepers who are enriched by the trade they bring are also for the most part foreigners. The district-born, as a class, have so far benefited but little by the growth of new industries." It may be added that the middle classes in the towns have suffered appreciably from the general rise of prices which has taken place during the last few years. They do not share in the enhanced profits of agriculture; from trade they hold aloof; they have to pay more for the necessities of life; wages and salaries have not kept pace with the rise of prices and have, in some cases, been forced down by competition; the standard of social expenditure is higher and social obligations no less stringent than they were a generation ago, and life is in many ways harder for respectable families who live on salaries or pensions and struggle to keep up appearances in an ancestral house built in more prosperous times.

As Mr. Gait points out, the statistics of villages have little real significance in Bengal. A village may be a mauza, the area demarcated in the course of a survey,—corresponding more or less to the English parish or the Teutonic mark—or it may be a collection of houses bearing a separate name. The former is, in theory at any rate, a definite unit, but it may contain no houses at all and its boundaries can only be traced with certainty in those parts of Bihar and Orissa which have been recently surveyed. As to the latter, in a densely peopled and peaceful country like Bengal where the communal system, if it ever existed, has long ago fallen into disuse, the tendency is for houses to straggle and it is often hard to say where one village begins and another ends, or to distinguish the parent village from the hamlets which it has thrown off. In the surveyed area the mauza was treated as the Census unit; in the rest of the province the boundaries of mauzas could not always be ascertained, and the residential village was frequently the basis of the enumeration.

61 The Bengal village contains on an average 335 inhabitants, but there are marked variations of size. The smallest villages are found on the Chota Nagpur Plateau, the average number of residents being 190. In Ranchi, however, where the organized communities of the Oraon and Munda tribes still retain a considerable degree of cohesion, the figure rises to 361. The high average (602) of North Bihar is doubtless due to the calculation being based on the mauza which may comprise several residential villages and the same reason probably explains why in Jalpaiguri a village has on an average 1,014 inhabitants and in Chittagong 915, while in Eastern Bengal generally the average is 398, and in Northern Bengal only 295. It may also be surmised that both in Chittagong and in Backergunge, where the average is 487, the lawless habits of the

people and the practice of satisfying a grudge against a neighbour by setting fire to his house may offer some inducement to congregate in large villages.

Nearly half of the rural population (46 per cent.) live in villages with less than 500 inhabitants, 42 per cent. in villages with 500 to 2,000 residents and only 12 per cent. in the larger villages which have more than 2,000 inhabitants. The proportion of persons living in the smallest villages rises to 71 per cent. in Chota Nagpur, and falls to 25 per cent. in North Bihar for the reason mentioned above.

Berar

62. Eighty-five per cent. of the people of Berar live in villages and fifteen per cent. in towns. Since the last Census there has been an appreciable set towards the towns, and the urban population has increased by 58,740 or 16 per cent. This is due partly to an addition of five places to the category of towns and partly to the expansion of the cotton trade and the erection of steam factories for pressing and ginning cotton which have attracted labourers into the towns. The number of cotton presses has nearly doubled, and that of ginning mills has increased by more than 50 per cent. since 1891. The importance of towns in Berar depends on their status as cotton marts. Amraoti (34,216) and Akola (29,289) both have branches of the Bank of Bombay and do a large business in cotton; Ellichpur, once the capital, is declining for want of trade; Khamgaon, Akot, Karanja and Shegaon attract an increasing proportion of immigrants by their commercial activity. The villages of Berar are fairly large, the mean population being 409. Of the rural population 37 per cent. live in villages with less than 500 inhabitants, and 49 per cent. in villages containing from 500 to 2,000 persons, the remaining 14 per cent. in villages of from 2,000 to 5,000 inhabitants. Seventy-six per cent. of the urban population and 89 per cent. of the rural population are Hindus. The Muhammadans form 21 per cent. of the town population and only 5 per cent. of the village population.

Bombay.

63. In Bombay, as in Berar, a decline in the general population has been accompanied by an increase in the number of persons living in towns who now constitute 19 per cent. of the total population as compared with 17 per cent. in 1891. Eighteen new places with a population of 66,521 have been treated as towns, while 25 whose population in 1891 aggregated 109,521 have been excluded owing to their having fallen below the standard of 5,000 inhabitants.

The famines through which the Presidency has passed during the decade have no doubt tended to drive the people to big centres of trade in search of work, but this influence must have been more than counterbalanced by the direct and indirect effects of plague epidemics which few of the Bombay towns have been fortunate enough to escape altogether, while some, including Bombay, Poona, Karachi, Surat, Belgaum and Dhárwar, have suffered grievously. The real cause of the growing movement towards urbanization is doubtless the great industrial development which has taken place, to which further reference will be made in the next chapter. Including Bombay, rather more than half of the urban population is found in towns with 20,000 or more inhabitants, rather less than a quarter in those with from 10,000 to 20,000, and the remaining quarter in those with less than 10,000. The concentration in towns is most noticeable in Gujarát, and especially in the Ahmedabad district, where more than a third of the population reside in municipal areas, and least so in Thar and Parkar where the proportion of town residents is only 3 per cent. The term "village" in Bombay refers to the area taken as such for revenue purposes, but uninhabited villages are left out of account. The total number of villages has increased since 1891 from 40,303 to 40,694. The average number of persons per village is 508 compared with 552 in 1891. The decrease is of course due to the losses sustained by rural areas during the famine years. One-fifth of the rural population live in villages with more than 2,000 inhabitants and one-fourth in villages with less than 500, and the remainder in villages with from 500 to 2,000. The typical village of the Maratha country is surrounded by high walls of rubble and concrete and is entered by gates guarded by imposing watch-towers.

Burma

64. Burma, with 9.4 per cent. of its inhabitants living in towns, has in most parts a much smaller urban population than would appear from this figure. More than two-fifths of its town dwellers are found in the modern commercial centre of Rangoon, and in Mandalay, the ancient capital, and if these cities be excluded the proportion falls to about 5½ per cent. Mianthawaddy, the most populous

district in Burma, and one of the most densely peopled, contains no town at all. On the other hand in Mandalay, a district thickly sown with the old capitals of the Burmese Kings, rather more than half of the people dwell in towns and in Amherst the urban population comes to nearly 21 per cent. The inhabitants of towns have increased by 4.5 per cent. since 1891, but the proportion which they bear to the total population has fallen considerably, owing partly to the inclusion in the scope of the present Census, of a considerable tract of new country entirely devoid of towns, and partly to the more rapid growth of the rural population throughout the Province. Mandalay is decadent, and although Rangoon is growing rapidly, it depends for its increase on immigrants from outside the Province. The Burman, though fond of gaiety, does not take readily to a town life and the competition which it involves with the industrious Chinaman and the natives of Madras, Bombay or Upper India, who puts up with a far lower standard of comfort. He prefers the peace and quiet of the country, and will doubtless continue to do so, so long as the supply of land fit for cultivation exceeds the demand.

The number of villages has risen since the previous Census, from 28,719 to 60,395, and the average number of inhabitants has fallen from 232 to 157. These changes are the outcome, not so much of the extension of the census operations to new areas, as to the wider interpretation given to the term village, which has now been taken to mean "the smallest collection of buildings known by a separate name." Each hamlet, however small, is treated as a separate village, and it is thus small wonder that nearly four-fifths of the total rural population are shown as dwelling in villages with less than 500 inhabitants and all but a fourteenth of the remainder, in villages with less than 2,000.

65. The denizens of the towns of the Central Provinces represent 7.5 per cent. of the total population, compared with 6.0 in 1891, their number having risen from 778,248 to 897,082, - an increase of more than 15 per cent. This, however, is due in part to the inclusion of new places not treated as towns in 1891, and if these be excluded and a deduction of 15,000 made from the population of Sambalpur in 1891 on account of areas since excluded from that town, the rate of increase falls to 9.5 per cent. Even this is considerable when it is remembered that there has been a fall of 8.3 per cent. in the general population. This growth of the town population is due mainly to the improvements that have been made in railway communication which have caused a rapid development of trade at the main centres, and have encouraged the growth of new industries. The number of factories and mills has risen during the decade from 16 to 59. - There are in all 75 towns. Of these 13 have added over 30 per cent. to their population; 19 have added between 10 and 30 per cent., and the same number show smaller increases. On the other hand, 21 towns have lost population. Amongst the growing towns, Raipur and Bilaspur occupy a prominent place; both have benefited greatly by their position on the railway, and the latter has quadrupled its population since 1872. Saugor, on the other hand, has suffered by the diversion of traffic, and has now fewer inhabitants than it had in 1872. There are 46,162 villages or 1,458 more than at the previous Census, but the average number of inhabitants has fallen from 272 to 238. The census villages of the Central Provinces, which are based on the residential test and do not correspond to the survey unit of area, are unusually small. Nearly three-fifths of the rural population inhabit villages with less than 500 inhabitants, and seven-eighths of the remainder live in villages with from 500 to 2,000.

66. Of the entire population of Madras 89 per cent. live in villages and 11 per cent. in towns; and 52 per cent. of the urban population live in towns with more than 20,000 inhabitants. The highest proportion of town dwellers (14 per cent.) is found in the southern division and the lowest (7 per cent.) in the West Coast, where the people prefer to live in scattered homesteads, each surrounded by its own fence, rather than in compact groups of houses. In the Agency tracts there are no towns at all. The average population of a village varies from 1,059 persons on the West Coast to 107 in the Agency Division, and these figures no doubt represent a real difference, although, as Mr. Francis points out, there is some uncertainty as to what is meant by a village, and no attempt was or could be made to distinguish villages from hamlets. Another aspect of the same set of facts is expressed by saying that in the Agency tracts 85

per cent of the population live in villages of less than 500 persons, while on the West Coast only 10 per cent live in small villages. This proportion falls to 9 per cent in the Deccan, where walled and fortified villages recall the times of Maratha rule when people gathered together for protection and it was unsafe to live in the open country.

Punjab

67. In the Punjab and Frontier Province combined 88·6 per cent of the population live in villages and 11·4 per cent. in towns. The proportion of rural population rises to 96 per cent. in the Himalayan tract and falls to 85·2 in the Indo-Gangetic Plain. The town population is strongest in the districts of Delhi (34 per cent.), Lahore (22 per cent.), and Peshawar and Amritsar (18 per cent.). The three cities of Lahore, Delhi and Amritsar have between them a population of 573,968 or 22 per cent. of the town population of the Province; more than a third (34·5 per cent.) is found in large towns with from 20,000 to 100,000 inhabitants, and the remainder (43·4 per cent.) in towns with less than 20,000 persons. Of the rural population 28 per cent live in villages with less than 500 inhabitants; 52 per cent. in villages containing from 500 to 2,000 persons, and the remainder in villages with a population over 2,000. The proportion living in the smallest class of villages rises to 86 per cent in the Native States and falls to 24 in the North-Western Frontier Province where raids and blood feuds and a general sense of insecurity have driven nearly 31 per cent of the population to congregate in large villages protected by walls and towers of refuge.

United
Provinces

68 The proportional distribution of the population of the United Provinces of Agra and Oudh between towns and villages (11·1 and 88·9 per cent. respectively) is almost identical with that in the Punjab and Frontier Province. Owing to the exclusion of certain places with a population of less than 5,000 from the operation of the Chaukidari Act, XX of 1856 and to the omission of certain non-municipal areas with a larger population which were included in the list in 1891, but are really only overgrown villages, the number of towns has fallen from 490 to 459. The total urban population has declined from 5,417,516 to 5,377,453 mainly for the same reason; the number of towns with more than 10,000 inhabitants has increased. There have been fluctuations in individual towns due chiefly to changes in the course of trade caused by the railways and, in a few cases, to industrial development, but generally speaking there is no marked tendency either for the countryman to betake himself to towns or for the towns to decay. Nearly half the urban population dwell in places with over 20,000 inhabitants, and a fifth in those with from 10,000 to 20,000; towns with 5,000 to 10,000 furnish a fifth, and the smallest class of all between a seventh and an eighth. There are 108,644 villages, which here, as in the Punjab, are based on the survey mauza, and their average population is 397; 37 per cent of the rural community is contained in villages with less than 500 inhabitants and 51 per cent. in those with between 500 and 2,000, ten-elevenths of the remainder occupy villages with between 2,000 and 5,000.

Baroda

69. The proportion of town dwellers in Baroda (24 per cent.) is high for India and is due to the fact that including Baroda City there are as many as 47 towns in the State. Although, as the Superintendent observes, after a certain point has been passed 'the distinction between a town and a village is merely nominal,' there is no reason to suppose that the census definition of a town was applied differently in Baroda from elsewhere. Of the 76 per cent. of the population who live in the country, 54 per cent. are found in large villages with from 500 to 2,000 inhabitants. The average village contains 489 persons. The smallest (331 persons) are found in Navsari and the largest (623) in Kadi.

Central
India

70 Eighty-nine per cent of the people of Central India live in villages and only 11 per cent. in towns. In the hilly tracts the ratio of the rural population rises as high as 97 per cent. The only towns in the Agency with more than 50,000 inhabitants are Lashkar in Gwalior State (89,000), Indore (86,000) and Bhopal (77,000). Most of the villages are small; the average number of inhabitants being 230. Sixty per cent. of the people live in villages with less than 500 inhabitants.

Cochin

71 Of the entire population of Cochin only 11 per cent. are congregated in the seven towns of the State and 89 per cent. live in separate homesteads, each with a name of its own, scattered among rice fields or groves of cocoanuts.

The indigenous races of the West Coast object to living in close proximity

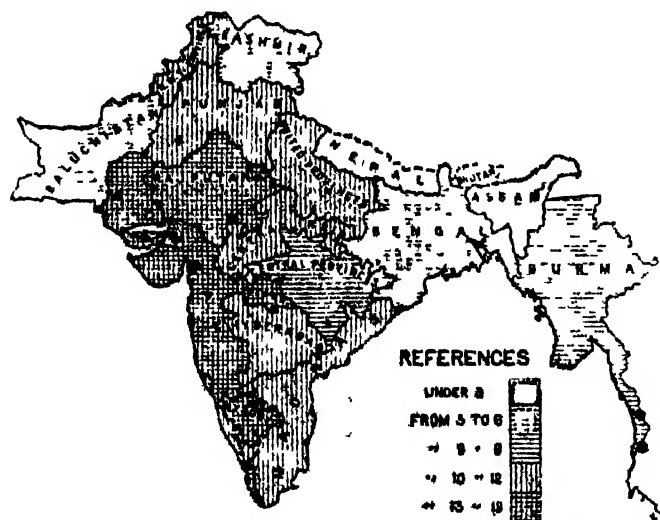
to their neighbours and streets or compact groups of houses are found only in the villages inhabited by Christians or by immigrants from beyond the Western Ghats. The *desam*, containing on an average two square miles of country and 1,111 inhabitants, is, however, not only an administrative but a social unit, with an organized staff of village servants and a Council of elders, presided over by a headman, which adjudicates on petty disputes and administers customary law.

72. The dwellers in the country form 85.5 per cent. of the population of the Rajputana Agency, the proportion rising to 89.5 in the southern division, where there are comparatively few towns, and 64.8 per cent. of the rural population live in villages of less than 500 inhabitants. The average size of a village is 278 persons, varying from 335 in the western division, where scarcity of water and insecurity of life have compelled people to gather together in certain localities, to 153 in the southern division, which contains a large Bhil population living in small hamlets scattered over a large area of wild country. The mean density of all these units has been reduced by famine, the effects of which will be discussed in the next chapter. "There are ten towns with a population of over 20,000, of which eight have been classed as cities, although among them Jaipur alone contains a population of over 100,000. All but Sikar, which is the home of rich bankers and merchants who have an extensive business in many parts of India, are the capital towns of States, and, with the exception of the present city of Jaipur, were originally permanent camps established round the forts of the Chiefs. Their rapid growth was due to the wealth of the surrounding districts being drawn into these permanent camps and attracting to them artisans and merchants—whose principal trade in those days was in arms, ornaments, cloths, and other articles of unproductive expenditure—who now form the bulk of their population. These ten cities and towns contain between them 5.5 per cent. of the total population and 38.1 per cent. of the urban population."

73. In India as a whole one-tenth of the population live in places classed as urban and the remaining nine-tenths in villages. Of the denizens of towns more than half are found in places with at least 20,000 inhabitants, about one-fifth in those with from 10 to 20 thousand, and the same proportion in those with from 5 to 10 thousand, while about one-sixteenth dwell in smaller towns. Excluding Ajmer and Baroda, the tendency to live in towns is most marked in Bombay, Berar, and Rajputana, and least so in Bengal and in

General
distribution
of urban
population

Map showing the percentage of the urban population in each province and state.



Note.—The proportions in Ajmer-Merwara and Baroda (36 and 24 per cent., respectively) are not shown in this map.

the remote tracts on the borders of the Empire, *viz.*, Baluchistan and Kashmir in the north-west and Assam in the north-east, elsewhere the proportions of the town dwellers are generally very uniform and, except in the Central Provinces, they range between 9.4 in Burma and 11.4 in the Punjab, including the North-West Frontier Province. The intensely rural character of remote outlying tracts, where the means of communication are inferior and there is but little trade, is easily understood, but it is not so clear why the urban population of Bengal should be so much below the general average and that of Bombay so much above it. The result, so far as Bombay is concerned, may be due in part to its extensive sea-board, which has given it a relatively large number of important trading centres and has encouraged industrial development. In Bengal, on the other hand, foreign trade is of comparatively recent origin, Calcutta is the only important seaport, and although its trade is, of course, very great, so too is the population behind it. Moreover Bengal has been for many centuries under foreign domination, and court influence, which has had such a powerful effect on the growth of towns elsewhere, has done little, since the Muhammadan conquest, to encourage people to settle in large towns. Race also is possibly

an important factor, and the Mongoloid element in the population of Bengal may be less inclined to congregate in towns than the Dravidian and Aryo-Dravidian inhabitants of other parts. Assam, which is even more markedly Mongoloid, has the smallest urban population of any part of India. That of Burma is comparatively high, but this is due to the figures for two towns, Rangoon and Mandalay. The latter owes its position to its having been the capital of the Kings of Ava, while the former is a creation of British trade and 55 per cent. of its inhabitants are immigrants from outside Burma. The Burman, like the Bengali and Assamese, has not a commercial mind, and, in all three provinces, trade is to a great extent in the hands of foreigners, amongst whom the enterprising Mārwaris are everywhere conspicuous.

Variation
since 1891

74. The growth of the urban population since 1891 is obscured by changes in the list of places dealt with; some of those included in the tables for that Census have been omitted on the present occasion, while others, not previously treated as towns, have been included. So far as they go, the figures show that while the total population of India has increased by only 2·4 per cent., that of towns has risen by 7·3 per cent.; in British territory the urban increase is 8·5 per cent., compared with 4·8 in the general population, and in Native States it is 3·5 against a decrease of 5·4 in their population as a whole. The general result is common to all the larger units except the Punjab and the United Provinces, which show about the same rate of progress in urban and rural areas, and Burma, Kashmir, and Mysore where the growth in the latter is much greater than in the former. The general drift towards towns may possibly have been accentuated at the present Census by the famine of 1900, which, in the areas afflicted, may have driven some of the poorer sections of the rural population to seek a livelihood in some neighbouring town, but the main cause of the phenomenon seems to lie in the growth of large industries, such as cotton and jute mills, railway workshops and the like, and the development of new trading centres which has been stimulated by the great improvement in communications that has taken place in recent years.

Religious
distribution
in towns.

75. The extent to which towns attract persons of different religions is shown in subsidiary table V. It will be seen that while less than 10 per cent. of the inhabitants of India, of all classes taken together, live in towns, more than 85 per cent. of the Parsis do so, and also 30 per cent. of the Jains and 22 per cent. of the Christians. In the case of Hindus and Muhammadans the proportions fluctuate in different parts of the country. In Bengal, Baluchistan, Assam, and the Punjab, the Musalman takes less readily to a town life than the Hindu, but in most other parts of India the rule is reversed, and the Muhammadans are relatively much more numerous in urban areas than they are in the villages, this is specially the case in Berar, the Central Provinces, Madras, the United Provinces, Central India, Hyderabad, Mysore and Rajputana, where the proportion of Muhammadans in towns is more than double that in the general population.

Cities.

Definition of
city and
number in
India

76 According to general statistical usage a city is regarded as a place with at least 100,000 inhabitants.* If we judge by this standard, there are only 29 cities in the whole of India, with an aggregate population of 5,605,827, or very little

Country	Number of cities	Aggregate population.
England	39	13,522,000
Germany	33	9,129,000
France	15	5,466,000
Rest of Europe .	62	12,502,000

more than 2 per cent. of the total population of the Empire. The main statistics relating to these places will be found in subsidiary table VI at the end of this chapter. In England nearly a third of the population is massed in cities, in Germany a sixth, and in France more than a seventh. It must be remembered, however, that, even in Europe, the growth of cities is comparatively recent, and that a hundred years ago the three countries mentioned above, had between them only 7 cities with a combined population less than a third as great as that of the Indian cities at the present time. The concentration in big towns which has since taken place is

* In the Provincial Reports a wider meaning has been given to the term "city" and many places have been treated as such on account of their local importance which do not fulfil the above condition as to numerical strength.

due entirely to the development of trade and large industries, for which the nineteenth century was remarkable in Europe, and it is possible that the industrial and commercial awakening of India, of which the first signs are already apparent, may result in a marked increase in its city population at no very distant date.

77. Table IV shows a rise in the population of cities since 1872 of 51 per cent., but this is due largely to the addition to the list of Hyderabad, Jaipur, Mandalay, and Srinagar, the two former of which were enumerated for the first time in 1881 and the two latter in 1891. Excluding this artificial cause of increment, the rate of increase of the city population shown by each successive census is as noted in the margin. The slow growth disclosed by these figures seems inconsistent with the suggestion that an era of rapid progress has commenced, but it must be remembered that the majority of the cities, as they now stand, owe their position to the fact that they are, or have been, political capitals, or are reputed to be of a sacred character, or are old-established commercial centres under conditions which are rapidly passing away. The recent changes in the course

Period.	Rate of increase per cent.
1872-81	+ 8.7
1881-91	+ 10.9
1891-1901	+ 8.7
TOTAL 1872-1901	+ 29.3

of trade brought about by the railways and the growth of new industrial undertakings have not yet had time, save in a few special cases, to raise to the rank of cities the places which they have brought into existence or rendered important. In some cases, the new conditions have attached themselves to old centres such as Delhi, Cawnpore, Agra, Ahmedabad, and Nagpur. These have received

City	Variation per cent since 1872.
Delhi	+ 33
Cawnpore	+ 61
Agra	+ 26
Ahmedabad	+ 55
Nagpur	+ 51

a fresh lease of life and are again growing rapidly, but many of the old cities are stationary or decadent. Mandalay, the former capital of the Kings of Ava, is declining, and so also is the capital of the Baroda State. Patna, which once thrived on the traffic along the Ganges, is steadily decaying, now that the trade is being diverted from the river to the railway. Benares and Allahabad have grown since 1872, but both have lost ground during the last decennium. Amongst the cities which owe their rank as such entirely to

recent conditions of trade and industry, the most remarkable instance of rapid development is afforded by Rangoon, which, in thirty years, has increased in population from less than a hundred thousand to very nearly a quarter of a million. The growth of Howrah, though less extraordinary than that of Rangoon, is also very considerable. Its population has risen from 84,000 in 1872 to more than 157,000, a gain of 87 per cent., which is due almost entirely to the development of its jute and cotton spinning industries, iron foundries, engineering works, etc. Madura, which now appears for the first time as a city, has more than twice the population it contained in 1872, and so has Karachi, which attained this rank in 1891. Many of the rising towns still have less than 100,000 inhabitants. To this category belong Peshawar, the door of the import trade from beyond the North-West Frontier, Jubbulpore, with its cotton and other mills and pottery works; Dacca, the headquarters of the jute trade in East Bengal, Multan, with its manufactures of carpets, silk fabrics, and pottery, Sholapur, the centre of the grain trade of the Deccan and a rising industrial town; Hyderabad in Sind; Hubli, Coconada and many others. It is impossible, within the limits of this report, to discuss in detail the statistics of these and other places. For further information

Town.	Present population	Variation per cent. since 1872.
Peshawar	25,147	+ 23
Dacca	90,542	+ 81
Jubbulpore	90,316	+ 61
Multan	87,224	+ 50
Sholapur	75,386	+ 41
Hyderabad (Sind)	69,378	+ 61
Hubli	60,214	+ 59
Coconada	48,096	+ 170

regarding them the Provincial Reports should be referred to. The only cities that will be dealt with here are the three Presidency towns, Calcutta, Madras and Bombay and Hyderabad, the capital of the Nizami's Dominions.

The Presi-
dency towns,
Calcutta

78. The growth of Calcutta dates from its occupation by Job Charnock on behalf of the East India Company in 1696 and an interesting account of its development by Mr A. K. Roy will be found in the historical section of the Calcutta Census Report. The population of the Settlement in 1710 was only 10 or 12 thousand, but it rapidly grew, and by the middle of the century, it is estimated to have exceeded 100,000 in the area owned by the company, or double that figure, if the area owned by private zamindars be included. The subsequent estimates of the population vary greatly, but it seems probable that by 1850 it was at least 400,000. The Census of 1872 showed a population (on the present area) of 688,000, and this has now, after a slight fall in 1881, risen to 847,796 which represents an increase of 84 per cent since 1872 and of 24 per cent. as compared with 1891. This is the population of the area administered by the Calcutta Corporation and of the cantonment of Fort William, and excludes 101,348 persons in the suburbs of Cossipore-Obitpur, Manicktola and Garden Reach, which are connected with Calcutta by a continuous stretch of buildings and are structurally an integral part of it, and 157,894 in Howrah, which lies along the opposite bank of the Hooghly, and is really as much a part of Calcutta as Southwark is of London. With these additions the capital of the Empire contains a population of 1,106,788, and takes a place amongst the twelve largest cities in the world. A hundred years ago the population of London was only 959,310 or considerably less than that of Greater Calcutta at the present time.

79. The arrangements for the Census were more complete than those of 1891 and the true rate of increase during the last decade is not so great as the figures quoted above would indicate. There is, however, no doubt that Calcutta is at present growing rapidly owing to the expansion of its industries and trade. Plague has been present more or less, for some years past, but although at certain seasons, it has caused a high mortality, it has never yet assumed the frightful proportions familiar to the inhabitants of Bombay, and it does not appear to have had so much influence, hitherto, in keeping down the population, although it has probably deterred many persons, who would otherwise have done so, from immigrating.

Including Fort William and the extensive maidan which belongs to it, the average number of persons per acre is only 41, but in the area administered by the Municipal Corporation it is 68, as compared with 54 in 1891 and 46 in 1881. The density varies in different wards, but nowhere does it approach that of the more congested parts of the capital of the Western Presidency; it is greatest in the Colootola, Jorasanko and Jorabagan wards, in the heart of the old town, where there are respectively 281, 202 and 201 persons per acre. The question as to how far these figures indicate a prejudicial degree of overcrowding depends on the style of buildings in which the people live and on the amount of sleeping space per head which they provide. This subject will be discussed in a subsequent paragraph.*

A remarkable feature of the demographic statistics of the Metropolis is the extent to which it draws its population from places beyond its limits. Barely one-third of the inhabitants of the area administered by the Calcutta Corporation own it as their birth-place. The rest are immigrants, of whom more than 123,000 come from South Bihar, Saran and Muzaffarpur, and about 90,000 from the United Provinces, 83,000 from the 24-Parganas, 47,000 from Hooghly, 25,000 from Midnapore, 78,000 from Cuttack, Burdwan, Dacca, Nadia and Howrah, and smaller numbers from other parts. In the suburbs and in Howrah the proportion of the foreign-born population is as great as, or greater than, in Calcutta itself.

Owing to the steady growth of the immigrant population, of which only one-quarter consists of females, the proportion of females to males has fallen from 556 per mille in 1881, to 507 at the present Census.

Bombay

80. The Census statistics of Bombay have also been dealt with in a separate report (by Mr. S. M. Edwardes), which, like the report on the Census of Calcutta, contains a most interesting résumé of the gradual development of the city. Mr. Edwardes traces its progress from 1661, when its possession passed from Portugal to England by the marriage treaty between Charles the Second and the Infanta of Portugal, down to the present day. Under the Portuguese it had a scanty population of about 10,000, but with the advent of the English came an era of rapid development; in the short space of 14 years the number of its inhabitants had risen to about 60,000, and in 1780 it was estimated to have

* Paragraph 87.

reached 100,000. In 1814 it was believed to be 180,000 and in 1836, 236,000; during the next 36 years the progress was very great and the Census of 1872 disclosed a population of 644,405 or more by about 11,000 than that of Calcutta in the same year. During the 19 years that followed the rate of increment was still very high and the population in 1891 stood at 821,764. For the next five years the city, doubtless, continued to grow, but since then the plague, which first appeared in September 1896, has struck a severe blow at its prosperity, not only by the heavy mortality that it has caused, which is estimated to have amounted to 114,000 up to the date of the Census, but also by the dispersion of many of its inhabitants and the general dislocation of trade and industry that resulted from it and from the measures taken to combat its ravages which at first created great uneasiness amongst the more ignorant sections of the community. The result is that instead of a further accretion of at least 8 per cent., the present Census shows a population of only 776,006, a decrease of about 6 per cent. Mr. Edwardes thinks that the number enumerated would have been greater by 43,000, but for the temporary departure of many of the regular inhabitants to places beyond the limits of the city, owing to fear of the plague. If so, the true population at the present time is very little less than it was in 1891, in spite of the plague epidemic and its attendant evils.

81. The mean number of persons per acre is 51, compared with 58 ten years ago, but this figure is merely the arithmetical mean for the whole area and affords no idea of the density in the congested parts in the heart of the city. In the Kumbharwada and Khara Talao sections, the local head-quarters of the Jain community, in spite of a decrease of 14 per cent. since 1891, there are 598 and 556 persons per acre respectively. The plague has caused a general movement from the more crowded parts in the centre of the city to the sparsely inhabited area in the north. All the sections in the former tract have lost a large part of their population, amounting, in some cases, to as much as a quarter or even a third, while all the latter have gained greatly; as compared with 1872 Byculla, Parel, Sewri, Sion and Mahim, have more than doubled their population, while that of Worli is $3\frac{1}{2}$ times as great as it was in that year. As communications improve, it is probable that the trend towards the northern suburbs will become more marked, and that the overcrowding in the heart of the city will be much relieved in consequence.

Bombay is even more dependent than Calcutta on immigration from outside, and less than a quarter of its inhabitants at the time of the Census claimed it as their birthplace. The great recruiting grounds are, however, nearer to hand than in the case of Calcutta, which lies in a tract where the people are far too prosperous to be attracted by the mills or to be willing to serve as coolies. Ratnagiri alone contributes 146,000, or 24.5 per cent. of the total immigrant population, and Poona and Satara between them supply nearly as many more; Kathiawar sends 45,000; Cutch and Surat give respectively 28,000 and 25,000, and the contingents from Kolaba, Thana and Ahmednagar range between 10,000 and 21,000. The immigrants from the United Provinces number 30,000; 19,000 come from Goa and 10,000 from Rajputana.

The sex proportions of the inhabitants of Bombay have fluctuated greatly from time to time. In 1881 the number of females per 1,000 males was 664; at the next census it fell to 586, and it has now again risen to 617. Amongst the foreign-born population it is 546, while amongst those born in the city it is 293.

82. The Capital of the Madras Presidency, though ranking next to Calcutta and Bombay in point of population, differs from them in many respects. Although it possesses no less than 509,846 inhabitants it is of comparatively small industrial importance; it thus attracts far fewer immigrants and the foreign-born constitute less than one-third of the total population. These again come chiefly from other parts of the Presidency and especially from Chingleput and North Arcot, which between them supply nearly 94,000, or between one-half and three-fifths of the total number of immigrants. Those contributed by other provinces and states are in the aggregate less than 12,000. Owing partly to the comparatively small proportion of immigrants, and partly to the fact that they usually bring their wives with them (amongst the foreign-born there are 9 females to every 10 males) the two sexes are almost on a par, whereas in Calcutta and Bombay, females are in marked defect. In spite of its smaller population, the area of Madras differs but little from that of the other Presidency

towns and there is thus far less overcrowding. In the city, as a whole, there are only 29 persons per acre against an average of 68 in Calcutta (excluding the Fort) and 51 in Bombay. The density is greatest in Division No. II; there are here 139 persons to the acre and in several of the adjoining divisions the number ranges from 64 to 93. In the west and south of the city, on the other hand, it is only 8 and 12, respectively.

The population of the city has grown by 28 per cent. since 1871, when it stood at 397,552. Between 1871 and 1881 the rate of increase was small, being barely 2 per cent., but in the decades ending in 1891 and 1901 it has amounted to 11·5 and 12·6 per cent., respectively, compared with 15·7 and 7·2 per cent. in the Presidency as a whole. The increment during the past ten years is due mainly to immigration, and the rate of increase amongst persons born in the city is only 7·2 per cent., or exactly the same as the general rate for the Presidency. The most rapid growth is shown by Division No. IV, in the north-west corner, which now contains nearly two-and-a-half times the number of inhabitants that were found there 30 years ago. The earlier estimates of the population of Madras were curiously wide of the mark. In 1763 it was calculated at nearly a million, and a rough count in 1822 resulted in an estimate of 470,000, or more by 73,000 than that ascertained at the first regular census in 1871.

Hyderabad

City Municipality	209,805	448,466 but this includes not only the City Municipality, which lies surrounded by a wall on the right bank of the Musa, but also that of Chadarghat, the site of the British Residency, on the opposite side of the river, which occupies in relation to the city itself much the same position that Howrah does in regard to Calcutta, as well as the Cantonments of Secunderabad and Bolarum. The former of these cantonments extends from 4 to 10 miles north of the city and the latter lies still further away, and it is very doubtful if either should be treated as part of Hyderabad. If we exclude them, but retain Chadarghat and the Residency Bazaar the population falls to 352,028 which is still more than that of any city in India other than the three great Presidency towns. Since 1891 the City Municipality has added 28,848 to its population, an increase of more than 15 per cent. The Chadarghat Municipality has lost to the extent of 1,305 persons while the other three areas have gained between them 5,884, and the net result for the whole city, in the extended sense in which the term is used in the Hyderabad Census Report is an increase of 33,427 persons or 8 per cent. The average population per house is 4·4 and the density, 27 persons per acre
Chadarghat	125,319	
Secunderabad	83,550	
Bolarum	12,888	
The Residency Bazaar	18,904	
TOTAL	448,466	

Houses and House Room.

Definition of house

84. In England the space within the external and party walls of a building is taken as the house. In America it is "a place having a separate entrance," but an apartment house is treated as a single entity, even though it has separate front doors leading to the different apartments. In Scotland the quarters or flat has usually been taken. In France the holding, or area having a separate number in the district register, constitutes one house, even though it may contain separate buildings in no way connected with each other. Briefly, in England and America the structure or the building is the criterion, in Scotland the manner of its occupation, and in France its site. In India each family usually occupies several buildings. Owing to the great diversity of structure in different parts of the country * it was impossible to lay down any general prescription as to what should be held to represent a house, and Provincial Superintendents were allowed, as in 1891, to adopt whatever definition might seem best suited to local conditions. Except in the larger towns, the population of which is relatively very small, the question of overcrowding does not arise, and the statistics showing the mean number of persons per house or of houses per acre, do not possess the importance which is rightly attached to them in Europe. It was, therefore, pointed out that in framing the definition the main point to be considered was the facilitating of the actual census operations. In the various definitions adopted in different provinces in 1881, the point usually looked to was the

* An interesting description of the various types of buildings found in different parts of India will be found in the last Census Report pages 53 to 56

existence or otherwise of a separate entrance from the public way, all buildings within the same enclosure which had a common entrance were treated as constituting, for census purposes, a single house. At the last two enumerations, however, the tendency has been growing to take the commensal family rather than the enclosure as the criterion, and in Bengal, Burma and Assam the definitions laid down in 1891, though varying in their precise terms, were framed on this basis, while in the United Provinces, though the enclosure was still retained as the main general diagnostic, permission was given to treat the residence of each family as a separate house in cases where the enclosure was inhabited by more than four families. At the present Census the commensal family has been adopted as the sole test in the United Provinces as well as in the Provinces where it had already been taken as such in 1891. Elsewhere the older standard was generally adhered to, and separate families inhabiting the same enclosure were treated as belonging to the same census 'house.'

85. It might be thought that under these circumstances the average number of inhabitants per house would vary greatly in different parts of India, but as a matter of fact, except in the Punjab and parts of the United Provinces, where the practice of congregating a number of buildings occupied by different families within the same mud-wall enclosure is unusually prevalent, it is only in the case of the comparatively well-to-do that the differences arising from the two definitions have any marked effect on the house numbering. Amongst the lower classes, who form an overwhelming majority of the population, the dwelling place with a separate entrance usually corresponds to the residence of a commensal family, and the average population per house is in consequence fairly uniform in most parts of India. In Burma and Madras it is 5, in Bengal 5.2, and in Bombay, Central India and Rajputana 5.1. It falls to 4.8 in Bihar, 4.6 in Assam and 4.4 in Ajmer; and rises to 5.5 in the United Provinces, 6 in Kashmir and 6.2 in the Punjab. The high figure for the Punjab is due, as already explained, to the frequent collection of several families in the same enclosure. That for the United Provinces is attributable to the same cause, coupled with the circumstance that, although the old definition of house was abandoned on the present occasion, the enclosure was still in practice often taken as the census house, the absence of uniformity in applying the new definition is shown in some cases by great variations in the figures for adjoining districts, *e.g.*, for Bareilly and Pilibhit, where the averages are 7.7 and 4.6 respectively.

In view of the want of uniformity attaching to the meaning of the term house there is nothing to be gained in lingering longer over the figures connected with it. The following observations are, however, extracted from the report for Bengal, where the instruction, that a house should be taken to mean the residence of a commensal family is said to have been very generally followed —

"If it were not for the joint family system, *i.e.*, if every man living with his wife had a home of his own, the varying size of the house, which would then represent the family in the ordinary acceptance of the term, would afford a good index to the progressiveness or decadence of the population. As matters stand, however, these differences may equally well be due to the varying extent to

Natural Division	Number of houses per 100 married females aged 15 and over
Province	96
West Bengal .	119
Central " .	109
North " .	101
East " .	97
South Bihar .	84
North " .	85
Orissa	91
Chota Nagpur plateau	98

which, in different districts or at different times, married sons remain in, or leave, the parental roof. Some idea of the practice prevailing in different localities may be gathered by comparing the number of houses in a district with the number of married females over 15 years of age, but here too the comparison is obscured by the fact that in some places, the proportion of married females only slightly over 15 years of age is higher than in others. This is especially the case in parts of Bihar, but even if this be allowed for, it is clear that in this part of the province, sons do not so readily leave their parents' home for a new one of

their own as they do elsewhere. The setting up of a separate house is a less simple matter in the crowded village sites of Bihar than it is in Bengal proper; the people, moreover, are poorer, and many of the men who go to Bengal for work, leave their wives in the charge of relatives who will look after them."

Houses in
towns

86 The diversity in respect of the system of numbering houses in towns was far greater than in rural areas, and it would be impossible to review the subject for India as a whole. The following remarks will, therefore, be confined to the question of house accommodation in the Presidency towns for which the information is more complete than elsewhere and where the question of overcrowding is most important.

Calcutta

87. In Calcutta the definition of a house in 1891 was "a place bearing a separate Municipal assessment number" On the present occasion it was the same as in the rest of Bengal, *viz*, the residence of a commensal family. The change of definition has caused a material alteration in the average population per house which is now 6·7 against 10·1 at the previous census. Much depends on the character of the building and the number of rooms it contains, and on these points the information contained in Mr. Blackwood's report is very complete. Of the total number of houses, excluding shops, warehouses, etc., 68,929 are *kacha* and 28,195 are *pakka*; each of the former contains on an average, rather less than 3 rooms and 6·5 persons, and each of the latter, 6 rooms and 10·4 persons. Three-fifths of the inhabitants live in *kacha*, and two-fifths in *pakka*, houses. One-eighth of the total number live in a single room shared with at least three other persons, and one-half share a room with at least one other person; only 3 per cent. have one or more rooms to themselves.

The minimum sleeping air space allowed in barracks and common lodging houses in England is 300 cubic feet per head, but special enquiries made by Mr. Blackwood in some typical congested areas in Calcutta show that there the space generally ranges between 200 and 300 cubic feet; in a few instances it is greater, but it is also often less, and in two exceptional cases it is only 109 and 129 cubic feet respectively. The local conditions in England differ greatly from those in India, and in this country, owing to the style of buildings and to the fact that doors and windows are more often kept open, the same amount of air space is not necessary, but even so, it is clear that in areas such as those just referred to, the people are terribly overcrowded.

Bombay

88 In Bombay there is no record as to the system followed in 1891, but at the present Census a house was treated as "a building under one undivided roof" According to this definition a row of rooms under a common roof constituted a single house, although each apartment might be inhabited by a separate family, the rooms or suites of rooms occupied by each separate rent-payer were regarded as tenements, and were counted accordingly. The total number of houses is 38,843, of which 8,718 were unoccupied on the night of the Census owing chiefly, it is said, to the plague exodus. The average number of persons per occupied house in the city as a whole is 23·8 as compared with 14·4 in 1891, but it varies in the different wards from 35 to 15. In some of the big *chauls* or lodging houses the number of inhabitants is very great, and in exceptional cases it ranges from 500 to nearly 700 persons.

Mr. Edwardes gives a great deal of interesting information regarding tenements, of which a summary will be found in the marginal table. The total number of tenements was 220,686, excluding 62,487 that were unoccupied when the census was taken; each tenement was inhabited on the average by 4·54 persons. Four-fifths of the population are found in tenements with one room and only one in a hundred in tenements containing six or more rooms. The proportions vary a great deal according to the religion professed. Of the Parsis only a quarter live in a single room,

and of the Christians only two-fifths, while of the Hindus no less than nine-tenths are thus domiciled.

Madras

89. For Madras details similar to the above are not available. The separate entrance seems to have been the basis of the definition of house in the city as well as in the rural areas, both in 1891 and at the present Census, but on this occasion more care was taken to exclude the "long rows of bazars or small single rooms facing the street with no cooking or sleeping apartments attached to them and in which no one ever sleeps at night." The average population per house rose in consequence from 7·5 to 9·1.

Tenement, with	Number per cent of population inhabiting them	Average per room of each tenement
1 room	80 86	4 20
2 "	7 32	2 54
3 "	3 21	2 06
4 "	2 31	1 76
5 "	1 32	1 58
6 or more rooms	4 98	2 34

Note (1)—Showing Mr. Blanford's scheme of Natural Divisions.

A.—INDO-GANGETIC PLAIN

NOTE 1—1 Punjab Tract.—The Indo Gangetic Plain west of Delhi, including the Punjab and Sind. The desert tract of Western Rajputana is included as far as the base of the Aravalli range, as is also the peninsula of Cutch, and to the westward, the hills of Sind and the Western Punjab. Baluchistan is also added, it might perhaps equally well have been kept separate, but the only difference in the fauna that is of any importance is that certain Indian species, such as the common antelope, the nilgai, the bhariala and the hog-deer, which are found locally in parts of the tract, do not range west of the immediate neighbourhood of the Indus. To the northward also the lower spurs of the Himalayas must be regarded as part of the present subdivision. The eastern boundary of the Punjab tract coincides with the limit, to the eastward, of the area with an average yearly rainfall of 20 inches or less. The rainfall diminishes to the westward, and parts of Sind are almost rainless.

The whole area is desert or semi-desert, except near the rivers, and cultivation, as in Egypt, is dependent upon irrigation. The hills west of Sind and the Punjab rise to a considerable elevation, and the interior of Baluchistan is from 3,000 to 6,000 feet above the sea.

2 North-Western Provinces Tract.—The Indo-Gangetic Plain from Delhi to Rajmahal (or from nearly 77° E long. to about 88°). This is for the most part cleared and cultivated, and is the most thickly populated area in India, when not cleared the land is covered with long grass 6 to 20 feet high. The average rainfall is about 35 inches, varying from 25 in the western part to 50 inches in the eastern.

3 Bengal Tract.—Indo-Gangetic Plain and Ganges delta from the meridian of Rajmahal to the Assam Hills, together with the plain of the Brahmaputra as far as Goalpara, and also Cachar, Sylhet, the plains of Tipperah, and all Lower Bengal. This is a much damper area than the last, with a heavier rainfall and with much more extensive tracts of uncleared grounds, chiefly covered with high grass, except near the sea (Sundarbans), where trees of peculiar kinds form forests. Rainfall 50 to 100 inches, annual average 65.

B.—THE PENINSULA.

4 Rajputana or Central Indian Tract.—Rajputana and Central India with Kathiawar and the Surat district and all the country south and south-east of the Indo-Gangetic Plain as far south as the Nerbudda River, and a line running in an E.N.E. direction from Jabalpur to Sherghati, near Gaya, so as to include the Kaimur Hills and Sone Valley. An undulating and hilly tract cleared and cultivated in parts, elsewhere covered with brushwood or thin forest of small trees. Rainfall 14 to 55 inches, average about 35.

5 Deccan tract from the Nerbudda to the southern edge of the Mysore plateau and from the neighbourhood of the Western Ghats to long. 80° E. This comprises the greater part of the Bombay Presidency east of the Sahyadri or Western Ghats range, together with the western part of the Central Provinces, the whole of Bihar, nearly the whole of the Nizam's territory and Mysore. The greater part of the area has been cleared of forest, and a large part is cultivated, though there are still extensive tracts of rather thin forest, brushwood and grass remaining in the more hilly parts, especially to the northward in the Nerbudda and Tapti country, and in parts of the Nizam's territory. The average rainfall is about 30 inches.

This Deccan sub-division almost corresponds to the area covered by the Deccan trap, horizontal or nearly horizontal basaltic lava flows of Upper Cretaceous age.

6 Chota Nagpur-Orissa Tract.—Western and south-western Bengal with Chota Nagpur, Orissa, the Northern Circars, and the eastern portion of the Central Provinces. This tract lies between the Indo-Gangetic Plain to the north and the Kistna River to the south, and extends from the Bay of Bengal to long 80° E. It is a hill country covered for the most part with forest, and, except in a few areas, sparsely populated. The rainfall averages about 50 inches, being higher near the coast, and lower inland.

7 Carnatic or Madras Tract.—The Peninsula south of 12° N lat, and east of the Western Ghats, comprising the Carnatic but excluding the Mysore plateau. The plains of the Carnatic are much like those of the Deccan and are for the most part cleared, but there are scattered hill groups generally covered with forest and with a much higher rainfall than the plains. The average temperature is slightly higher than that of the Deccan, but more equable, the average annual range of the thermometer being considerably smaller. The average rainfall is about 35 inches.

8 Malabar Coast Tract.—The Western or Sahyadri Ghats and the western coastlands of the Peninsula from the south of the Surat district to Cape Comorin. The northern portion included in the Bombay Presidency is known as the Konkan, the southern part, in the Madras Presidency, as the Malabar Coast. Though in many places near the coast cleared and cultivated, this area is largely covered with high tropical forest. Parts of the Western Ghats rise to a considerable elevation, the Nilgiris and Annamalais forming small plateaux about 7,000 feet above the sea, the highest summit on the former, Dodabetta, being 8,640 feet high, and that on the latter, Anamudi, 8,840. These are the highest elevations in the Peninsula. The fauna and flora are rich. The rainfall varies greatly being 74 inches at Bombay, 115 at Cochin, and no less than 261 at Mahablieshwar on the edge of the Sahyadri scarp, but throughout the greater part of the area it exceeds 100 inches annually.

C.—HIMALAYAS.

9. Western Himalayan Tract.—Forests of the Western Himalayas from Hazara to the western frontier of Nepal. The lower hills to the westward have the same fauna as the plains, but to the eastward Himalayan types are found in the dense forest down to the base of the hills. The western zoological limit of the Himalayas cannot be exactly determined, Oriental forms disappear gradually to the westward, but a good number are found in Kashmir and even in Hazara. The slopes from the base of the hills to between 10,000 and 14,000 feet, the upper limit of forest, might be divided into two or three zones, but it is rarely possible to obtain accurate information as to the range of different animals, and this range in birds and mammals often changes with the season. The average rainfall varies from 80 to nearly 100 inches annually (and locally even more than 100) being higher to the eastward than to the westward, and more copious on the southern face of a ridge than on the northern.

10. Eastern Himalayan Tract.—Forest area of the Eastern Himalayas from the western frontier of Nepal to the head of the Assam Valley (Mishmi Hills). This is more tropical, and far more extensively forest clad than the Western Himalayas, the rainfall is much heavier, the population scantier, and the clearances for cultivation less general. Average rainfall 50 to 120 inches.

D.—ASSAM, BURMA, ETC., EAST OF THE BAY OF BENGAL.

11. Assam Tract.—Assam, with the hills to the southward (Garo, Khasi, Naga), Manipur, and Chittagong. This is an area of hills and dense forest, closely resembling in physical features, as in the fauna and flora, the Eastern Himalayas. The plain of the Upper Brahmaputra in Assam really belongs to the great Indo-Gangetic Plain area, but the fauna appears to be of the Burmese type. Rainfall very heavy, the average probably exceeding 100 inches.

1. Upper Burmese Tract.—Burma, north of the Prome and Toungoo, or at about 18° N lat. This consists principally of the Irrawaddy drainage area, and extends north to the ranges that form an eastern continuation of the Himalaya. The zoology of the northern and eastern portions is imperfectly known. A great part of the country, including all the hilly tracts, is covered with forest, but the undulating ground in the southern part of the area is chiefly occupied by brushwood. The rainfall is not accurately known, but the Thayetmye average of 45 inches is probably a fair approximation.

2. Pegu Tract.—Pegu, south of Prome to the hill ranges east of the Sittang and the whole of Arakan. The hills of this country are forest-clad, the plains of the Irrawaddy and its delta, except where cultivated, are chiefly covered with high grass. The population is almost confined to these plains. Rainfall about 73 inches.

3. Tenasserim Tract.—Including Karenni to the northward and the hill ranges east of the Sittang, and extending south to the Malay Peninsula. A hilly country of dense forest with a rainfall of about 170 inches.

Note (2)—Areas shown in Table I.

In most cases the areas shown in Table I differ from those in the previous Census Report. The minor changes are due to the incorporation of the results of recent surveys, and occasionally to interprovincial transfers of territory, but in several provinces, new areas have been taken into account, viz., in Assam, Manipur, and part of Lushai, in Bengal, Sikkim, in Burma, the Chin Hills, and in Baluchistan, almost the whole country. In the Punjab, the difference is due to the Census Superintendent having adopted the areas shown in the Provincial Land Revenue Statistics, which differ greatly from the figures used in previous Census Reports.

SUBSIDIARY TABLE I.

Population and Density by Natural Divisions.

NATURAL DIVISIONS*	Normal rainfall, Mean and Extremes	Variability, Mean and Extremes	Area in Square Miles	Population	Density.	Percentage in acres of cropped area under character- istic crops
1	2	3	4	5	6.	7
Himalaya and Sub- Himalaya, West	Mean 50.1 . Mussoorie 99.2 . Kailang 25.5 .	Mean 101 . Ludhiana 141 . Munee 78 .	142,739	17,339,782	121.5	Wheat . 38 Pulses . 14 Other millets . 13 Maize . 12 Rice . 11 Oilseeds . 2 Sugar and Drugs 6
Himalaya and Sub- Himalaya, East	Mean 71.9 . Jalpaiguri 135.4 . Balmuch 44.5 .	Mean 108.3 . Pune 143 . Darjeeling 55 .	75,810	36,193,928	477.4	Rice . 53 Pulses . 25 Other millets . 17 Wheat . 11 Oilseeds . 5 Sugar and Drugs 4
Indo-Gangetic Plain, West	Mean 30.9 . Allahabad 37.9 . Lahore 20.3	Mean 130.3 . Cawnpore 159 . Meerut 97 .	73,159	30,069,771	409.3	Wheat . 24 Other millets . 35 Pulses . 27 Rice . 10 Oilseeds . 2 Sugar and Drugs 4
Indo-Gangetic Plain, East	Mean 47.5 . Burdwan 56.4 . Benares 39.9 .	Mean 81.7 . Gaya 94 . Burdwan 70 .	40,184	19,676,126	489.6	Rice . 59 Pulses . 21 Other millets . 18 Wheat . 6 Oilseeds . 4 Sugar and Drugs 3
Delta of Bengal	Mean 79.4 . Silchar 125.9 . Berhampore 56.3	Mean 71.3 . Narayanganj 85 . Jessore 56 .	61,855	35,821,824	552.3	Rice . 80 Pulses . 8 Other millets . 3 Oilseeds . 4 Sugar . 3
Brahmaputra Valley	Mean 92.3 . Dibrugarh 110.6 . Tezpur 70.2 .	Mean 61.2 . Dhubri 94 . Sibsagan 47 .	36,520	3,062,003	83.8	Rice . 73 Pulses . 3 Oil . 10 Sugar and Tea 10
North-West Div Area	Mean 11.4 . Cherat 25.1 . Jacobabad 3.9 .	Mean 194.6 . Pachpadra 362 . Cherat 80 .	201,972	18,568,310	67.1	Wheat . 30 Other millets . 24 Pulses . 9 Oilseeds . 7 Sugar and Drugs 1
Central India Plateau	Mean 31.6 . Mount Abu 60.4 . Sambhar 20.3 .	Mean 127.5 . Mount Abu 200 . Indore 94 .	180,780	16,053,530	122.7	Cholam . 28 Pulses . 27 Other millets . 16 Wheat . 11 Rice . 3 Oilseeds . 8

SUBSIDIARY TABLE I.

Population and Density by Natural Divisions. — *concl'd*

NATURAL DIVISIONS.	Normal rainfall, Mean and Extremes.	Variability, Mean and Extremes.	Area in Square Miles.	Population.	Density	Percentage in acres of cropped area under character- istic crop
1	2	3	4	5	6	7
West Satpuras . .	Mean 39.1 . .	Mean 127.3 . .	43,798	6,461,884	147.5	Cholum . . 36 Other millets . 17 Pulses . . . 9 Wheat . . . 3 Oilseeds . . . 9
	Chikalda 67.7 . .	Akola 164 . .				
	Malegaon 23.0 . .	Nagpur 98 . .				
East Satpuras . .	Mean 57.7 . .	Mean 91 . .	152,455	16,759,028	109.9	Rice . . . 52 Pulses . . . 18 Other millets . 8 Wheat . . . 7 Oilseeds . . . 7 Sugar . . . 1
	Pachmarhi 76.5 . .	Raipur 116 . .				
	Raipur 50.8 . .	Chalbassa 61 . .				
Deccan	Mean 29.7 . .	Mean 138 . .	155,177	23,441,579	151.1	Cholum . . 16 Pulses . . . 17 Other millets . 11 Wheat . . . 4 Rice 3 Oilseeds . . . 6
	Belgaum 51.2 . .	Sholapur 100 . .				
	Bellary 19.3 . .	Belgaum 84 . .				
Gujarat	Mean 27.6 . .	Mean 181.8 . .	66,936	9,108,799	136.1	Bajra . . . 17 Cholum . . . 17 Other millets . 18 Pulses . . . 17 Oilseeds . . . 2 Sugar and Drugs 7
	Surat 42.9 . .	Bhuj 250 . .				
	Bhuj 14.3 . .	Ahmedabad } Rajkot } 157				
West Coast . . .	Mean 104.3 . .	Mean 94.2 . .	36,265	12,125,619	334.4	Rice . . . 75 Ragi 6 Pulses 9 Oil 2 Coffee 3
	Mercara 131.9 . .	Goa 120 . .				
	Trivandrum 58.4 . .	Cochin 72 . .				
South India . .	Mean 33.2 . .	Mean 94.2 . .	64,613	16,773,650	259.6	Ragi . . . 23 Pulses . . . 28 Other millets . 27 Rice 13 Oilseeds . . . 6 Sugar and Cotton 2
	Wellington 49.9 . .	Tinnevely 124 . .				
	Coimbatore 21.5 . .	Trichinopoly 67 . .				
East Coast, South .	Mean 48.0 . .	Mean 128 . .	28,180	10,121,090	359.1	Rice . . . 50 Pulses . . . 17 Other millets . 18 Oilseeds . . . 8
	Negapatam 54.6 . .	Nellore 146 . .				
	Nellore 35.4 . .	Negapatam 115 . .				
East Coast, North .	Mean 51.5 . .	Mean 105.4 . .	70,037	16,041,949	229.0	Rice . . . 65 Pulses . . . 11 Other millets . 8 Oilseeds . . . 6 Sugar and tobacco 1
	Balasore 67.3 . .	Waltan } Cocanada } 140 Cuttack 71 . .				
	Cocanada 39.8 . .					
Baluchistan . . .	Mean 8.7 . .	Mean 161 . .	76,977	810,746	11	Wheat, jowar, rice Statistics not known
	Quetta 10.0 . .	Chaman 171 . .				
	Chaman 7.5 . .	Kalat 144 . .				
Burma Coast . . .	Mean 152.9 . .	Mean 45.1 . .	61,097	3,860,038	63.2	Rice . . . 93
	Tavoy 204.0 . .	Bassoin } Diamond Island } 50 Rangoon 37 . .				
	Rangoon 98.0 . .					
Burma, Wet . . .	Mean 64.3 . .	Mean 53.3 . .	147,535	3,942,549	26.7	Rice . . . 83 Pulses . . . 2 Oil 1 Narcotics . . . 1
	Toungoo 78.7 . .	Thayetmyo 100 . .				
	Thayetmyo 38.3 . .	Tounggye 30 . .				
Burma, Dry Area .	Mean 32.6 . .	Mean 88 . .	38,617	3,054,936	79.1	Rice . . . 13 Cholum . . . 26 Pulses . . . 8 Other millets . 3 Oilseeds . . . 16 Narcotics . . . 1
	Yamothun 36.4 . .	Mandalay 100 . .				
	Mimbu 28.7 . .	Yamothun 78 . .				

1 *Jowar* or *cholum* — The "great Millet" (*Sorghum Vulgaris*)2 *Bajra* — The "green millet" (*Pennisetum Spicatum*)3 *Ragi* — The "Ebusin Corocana"

SUBSIDIARY TABLE II.

Density of the Population by Provinces, States and Agencies.

PROVINCE, STATE, OR AGENCY	MEAN DENSITY PER SQUARE MILE.				VARIATION, INCREASE (+) OR DECREASE (-)			NET VARIATION 1872 TO 1901 + OR -
	1901	1891	1881	1872	1891 to 1901.	1891 to 1891	1872 to 1891	
1	2	3	4	5	6	7	8	9
INDIA.	167	163	144	117	+4	+10	+27	+50
Provinces.	213	203	183	170	+10	+20	+13	+43
Ajmer-Merwara	176	200	170	146	-24	+30	+21	+50
Andaman and Nicobars	8	5	5	...	+3	...		
Assam	109	103	103	91	+6	-2	+11	+18
Baluchistan (including Agency Tract)	11				...			
Bengal (including States)	413	393	366	328	+20	+27	+38	+85
Bera	155	163	151	126	-8	+12	+25	+29
Bombay (including States)	135	143	121	122	-8	+19	+2	+13
Burma	41	44	43	31		+1	+12	+13
Central Provinces (including States)	102	111	99	79	-9	+12	+20	+23
Coorg	114	109	113	106	+5	-4	+7	+8
Madras (including States)	270	253	221	227	+17	+32	-6	+13
North-West Frontier Province	180	167	131	117	+13	+16	+31	+63
Punjab (including States)								
United Provinces of Agra and Oudh (including States)	432	425	400	380	+7	+25	+20	+52
States and Agencies.	92	97	81	31	-5	+16	+50	+61
Baroda State	241	298	260	247	-57	+20	+22	-6
Central India Agency	110	131	118	..	-21	+13		
Hyderabad State	135	140	119		-5	+21		...
Kashmir State	36	31	...	..	+5			
Cochin State	596	551	441	441	+55	+90	..	+155
Travancore State	416	361	339	326	+55	+22	+13	+90
Mysore State	188	168	142	172	+20	+26	-30	+16
Rajputana Agency	76	91	78	..	-18	+16		

NOTE.—The figures against Burma for 1872 and 1881 refer only to Lower Burma, those for 1891 include Upper Burma with the exception of the Shan States. The first Census was not in all cases effected in 1872. The actual dates will be found on the title page of Imperial Table II.

SUBSIDIARY TABLE III.

Distribution of the Population classified according to Density.

LOCALITY.	AREAS WITH A POPULATION PER SQUARE MILE OF							
	less than 200		200-400		400-600		600 and over	
	Area.	Population.	Area.	Population.	Area.	Population.	Area.	Population.
INDIA.	1,332,348	101,759,801	205,972	58,046,119	145,325	71,334,861	82,052	63,176,020
	75.4	34.6	11.7	19.7	8.2	22.2	4.7	21.1
Provinces.	708,143	56,423,859	162,364	46,924,537	133,817	66,056,703	82,880	62,162,193
	65.8	24.4	14.9	20.2	12.3	28.5	7.6	26.9
Ajmer Merwara . . .	2,711	478,912	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Andamans . . .	3,143	24,649	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Assam . . .	48,737	3,469,714	2,063	414,781	5,443	2,241,848	...	...
	86.7	56.6	3.7	6.8	9.6	36.6	...	...
Baluchistan . . .	45,804	308,246	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Bengal . . .	29,635	3,915,738	22,683	7,580,472	50,949	25,829,546	47,918	37,410,110
	19.6	5.2	15.0	10.2	33.7	34.5	31.7	50.1
Bera . . .	12,273	1,541,358	5,437	1,212,658	...	...	...	...
	69.3	56.0	30.7	44.0	...	...	...	...
Bombay . . .	92,120	9,751,506	29,247	7,271,743	1,675	760,306	22	776,006
	74.8	52.5	23.8	39.2	1.4	4.1	...	4.2
Burma . . .	236,719	10,255,713	...	...	...	...	19	234,881
	100	97.8	...	...	...	...	...	2.2
Central Provinces . .	86,459	9,876,646	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Coorg . . .	1,582	180,607	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Madras . . .	56,535	6,839,158	57,910	17,928,753	23,544	10,687,150	3,737	2,754,375
	89.9	17.9	40.9	46.9	16.6	28.0	2.6	7.2
North West Frontier and Punjab	73,942	7,781,598	25,981	7,508,550	10,720	5,192,041	3,032	1,041,415
	65.0	34.7	22.9	33.5	9.4	23.1	2.7	6.7
United Provinces . .	18,488	2,001,984	19,043	4,998,580	41,486	21,345,812	28,152	19,345,406
	17.2	4.2	17.8	10.5	38.7	44.7	26.3	40.6
States and Agencies.	624,205	45,335,942	43,608	11,121,582	11,508	5,278,158	72	713,827
	91.9	72.6	6.4	17.8	1.7	8.5	...	1.1
Baluchistan Agency . .	86,511	502,500	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Baroda State . . .	...	...	8,099	1,952,692	...	...	...	...
	...	...	100	100	...	...	...	...
Bengal States . . .	37,345	3,181,570	...	...	1,307	566,974	...	...
	96.6	84.9	...	...	3.4	15.1	...	...
Bombay States . . .	61,236	5,601,820	4,525	1,306,828	...	...	...	...
	93.1	81.1	6.9	18.9	...	...	...	...
Central India Agency .	77,415	8,342,876	1,357	285,905	...	...	...	...
	98.3	96.7	1.7	3.3	...	...	...	...
Central Provinces States	29,435	1,996,388	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Hyderabad State . . .	82,072	10,680,636	...	...	...	...	26	448,466
	100	96.0	...	...	...	...	...	4.0
Kashmir State . . .	80,900	2,903,578	...	...	...	...	...	...
	100	100	...	...	...	...	...	...
Madras States [including Cochin and Travancore]	416	48,464	1,100	380,440	8,453	3,704,182	...	...
	4.2	1	11	9.1	84.8	89.9	...	...
Mysore State . . .	15,016	2,072,445	14,382	3,201,593	...	...	46	265,361
	51.0	37.4	48.8	57.8	...	...	2	4.8
Punjab States . . .	27,816	1,742,609	7,867	2,267,999	849	413,790	...	...
	76.2	39.4	21.5	51.3	2.3	9.3	...	...
Rajputana Agency . .	121,263	7,997,376	6,278	1,726,125	...	...	...	...
	95.1	88.2	4.9	17.8	...	...	...	...
United Provinces States	4,180	268,885	...	...	899	533,212	...	...
	82.3	33.5	...	...	17.7	66.5	...	...

NOTE.—In this Table 32,215 persons in Malakand, Dir, Swat, and Chitral, the area of which is not known and 12,040 persons (Railway population) in Hyderabad have been omitted.
The figures in italics represent the proportion per cent which the area and population of each density group bear to the total area and population of the province or state concerned.

SUBSIDIARY TABLE IV.

Distribution of the Population between Towns and Villages.

PROVINCE, STATE OR AGENCY	AVERAGE POPULATION		PERCENTAGE OF POPULATION LIVING IN		PERCENTAGE OF URBAN POPULATION IN TOWNS OF				PERCENTAGE OF RURAL POPULATION IN VILLAGES OF			
	Per Town.	Per Village	Towns.	Villages.	20,000 and over	10,000 to 20,000.	5,000 to 10,000.	Under 5,000.	5,000 and over.	2,000 to 5,000	500 to 2,000.	Under 500
1	2	3	4	5.	6	7	8	9	10.	11	12	13
INDIA.	13,615	364	9.0	90.1	51.2	22.1	20.3	6.4	1.7	13.1	45.7	39.5
Ajmer-Merwara	31,328	475	26.3	73.7	94.4		5.6		1.6	22.5	43.9	32.0
Assam	9,514	266	2.9	97.1	37.1	20.3	30.1	12.5	0.1	4.6	38.2	57.1
Baluchistan (including Agency Tract)	6,672	375	4.9	95.1	61.4			38.6		9.8	33.0	57.2
Bengal (including States)	20,504	835	5.0	95.0	62.4	24.1	11.5	2.0	1.5	10.3	42.4	47.3
Berar	9,533	409	15.2	84.8	21.4	32.7	44.9	1.0		18.6	48.8	37.6
Bombay (including States)	14,466	508	18.8	81.2	51.0	23.6	19.2	6.2	2.2	17.4	51.3	29.1
Burma	19,037	157	9.4	90.6	62.6	17.9	17.2	2.8	1	1.4	19.4	79.1
Central Provinces (including States)	11,961	238	7.5	92.5	40.6	25.3	27.5	6.6		4.5	33.1	62.4
Coorg	8,050	345	8.4	91.6			44.1	55.9		4.1	55.4	40.6
Madras (including States)	18,279	623	11.1	88.9	51.5	32.8	15.4	8	4.9	26.8	51.2	17.1
North West Frontier Province	12,336	507	11.4	88.6	50.5	16.8	24.5	8.2	2.4	17.0	52.8	28.3
Panjab (including States)												
United Provinces of Agra and Oudh (including States)	11,716	397	11.1	88.9	49.4	18.2	21.0	11.4	0.8	10.5	51.2	37.5
Baroda State	9,975	459	24	76	32.7	24.9	27.2	15.2		17.2	54.3	28.5
Central India Agency	12,266	230	11.4	88.6	46.8	20.5	25.2	7.5		7.1	33.4	59.7
Hyderabad State	14,488	500	10.1	89.9	49.4	17.4	33.2			14.2	55.1	30.7
Kashmir State	79,374	307	5.5	94.5	10.0				1.6	6.6	39.9	51.9
Cochin State	12,497	1,111	10.8	89.2	48.0	17.8	34.2		13.2	31.6	46.7	8.5
Travancore State	20,426	712	6.2	93.8	59.1	32.9	8.0		1.9	22.3	59.9	15.9
Mysore State	5,641	285	18.0	87.0	36.7	7.6	22.1	33.6	2	2.9	40.1	56.8
Rajputana Agency	11,017	278	14.5	85.5	38.1	23.8	30.3	8.3	1	12.2	40.1	47.6

SUBSIDIARY TABLE V.

Number per 1,000 of the total population and of each main religion who live in towns.

PROVINCE, STATE OR AGENCY	- No. per 1,000 of population who live in towns					
	Total	Hindu	Musalman	Christian	Jain.	Parsee
1	2	3	4	5	6.	7
INDIA.	90	92	128	220	300	857
Provinces.	91	91	118	268	316	860
Ajmer-Merwara	263	207	524	786	266	988
Assam	29	40	22	56	287	
Baluchistan	49	382	25	978		976
Bengal	50	55	48	245	348	931
Berar	152	138	409	789	349	923
Bombay	188	167	236	518	316	864
Burma	94	545	341	220	588	902
Central Provinces	76	74	439	629	260	891
Coorg	84	65	272	289		976
Madras	111	102	281	196	81	874
Punjab and North-West Frontier Province	114	124	110	532	543	937
United Provinces	111	80	282	307	271	
States and Agencies.	118	102	231	129	276	832
Baroda State	240	230	445	313	446	819
Central India Agency	114	98	466	395	302	917
Hyderabad State	101	73	324	789	229	836
Kashmir State	55	71	50	600	991	1,000
Cochin State	103	89	154	146	1,000	
Travancore State	62	62	116	50		143
Mysore State	130	111	404	695	250	861
Rajputana Agency	145	124	339	646	246	894

SUBSIDIARY TABLE VI

Main Statistics for Cities.

CITY	Population in 1901	PERCENTAGE OF VARIATION		Number of persons per square mile in 1901.	Number of female to 1000 males in 1901	Proportion of Foreign-born per 1000 in 1901
		1901-1901.	1901-1901.			
1	2.	3.	4.	5.	6	7
1 Calcutta and Fort	547,796	+24.3	+33.9	43,390	507	657
2 Bombay and Cantonment	776,008	-5.6	+20.4	35,278	617	706
3 Madras and Cantonment	508,848	+12.6	+28.1	18,865	984	315
4 Agra and Cantonment	188,032	+11.4	+26.1	6,689	882	138
5 Ahmedabad and Cantonment	185,889	+25.2	+55.3	30,296	910	290
6 Allahabad and Cantonment	172,032	-1.8	+19.7	3,817	875	139
7 Amritsar and Cantonment	162,429	+18.7	+19.6	18,048	743	261
8 Bangalore City (C and M. Station)	159,046	-11.8	+11.6	6,627	961	
9 Bareilly and Cantonment	131,208	+8.4	+27.4	15,244	878	99
10 Baroda City and Cantonment	103,790	-10.8	-10.7	11,532	853	267
11 Benares and Cantonment	209,331	-4.6	+19.5	21,742	921	274
12 Cawnpore and Cantonment	197,170	+4.5	+60.6	37,538	772	381
13 Delhi and Cantonment	208,575	+8.3	+35.1	12,475	817	284
14 Howrah	157,594	+35.1	+87.1	17,510	577	659
15 Hyderabad and Cantonment	448,486	+8.0	...	17,249	931	261
16 Jaipur	160,167	+9	...		910	40
17 Kailash and Cantonment	116,663	+10.9	+105.7	1,643	706	487
18 Lahore and Cantonment	202,964	+14.8	+61.8	8,119	691	375
19 Lucknow and Cantonment	264,049	-3.2	-7.2	12,278	876	193
20 Madura	105,984	+21.2	+103.8	17,664	1,012	81
21 Mandalay and Cantonment	183,816	-2.6	...	7,453	964	252
22 Meerut and Cantonment	118,129	-1.0	+45.1	27,152	802	175
23 Nagpur	127,734	+9.1	+51.2		928	
24 Patna	184,785	-18.5	-15.1	16,961	1,011	85
25 Poona and Cantonment	153,320	-5.0	+28.9	27,845	915	122
26 Rangoon and Cantonment	234,881	+30.2	+137.8	12,362	419	680
27 Srinagar	122,818	+3.0	...	15,327	871	31
28 Surat	119,306	+9.2	+10.6	39,769	935	120
29 Trichinopoly and Cantonment	104,721	+15.6	+30.8	13,090	1,045	206

NOTE.—The proportions in column 4 in the case of the Punjab cities refer to the period 1900-1901.

SUBSIDIARY TABLE VII.

House-room.

PROVINCE, STATE OR AGENCY.	AVERAGE NUMBER OF PERSONS PER HOUSE			AVERAGE NUMBER OF HOUSES PER SQUARE MILE		
	1901.	1891	1881	1901	1891	1881
1	2	3	4	5	6	7
INDIA.	5.2	5.4	5.8	31.6	33.9	31.7
Ajmer-Merwara	4.4	5.3	7.2	39.6	37.5	23.6
Assam	4.6	4.8	5.5	23.1	22.8	15.4
Baluchistan (Districts and Administered Territories)	4.5	...	...	2.3	...	...
Bengal (including States)	5.2	5.4	6.3	79	73	59
Berar	4.8	4.9	5.7	32	33.3	26.3
Bombay (including States)	5.1	5.4	5.6	26.5	26.6	21.1
Burma	5.0	5.3	5.5	8.8	9.3	7.8
Central Provinces (including States)	4.8	5.0	4.3	21.2	22.1	23.9
Coorg	5.0	6.4	7.9	19	17	11
Madras (including States)	5.2	5	5	50	48	41
North-West Frontier Province	6.2	6.5	6.7	28.8	26.4	23.6
Punjab (including States)	5.5	5.7	6.4	78.7	74.2	62.8
United Provinces of Agra and Oudh (including States)	5.5	5.7	6.4	78.7	74.2	62.8
Baroda State	4.4	4.5	4.6	60.5	65.5	55.9
Central India Agency	5.1	5.2	5.5	21.5	25.2	22.3
Hyderabad State	4.9	5.0	5.3	27.6	27.6	25.9
Kashmir State	6	6	...	6	6	...
Cochin State	5.6	5.4	4.8	107.1	96.1	92.0
Travancore State	5.0	4.9	4.8	81.9	72.8	69.5
Mysore State	4.9	5.5	5.7	37.7	32.0	29.6
Rajputana Agency	5.1	5.5	4.9	14.9	16.7	16.2

SUBSIDIARY TABLE VIII.

Comparison of Area and Population of Districts in the Main Provinces.

PROVINCE.	Population of British Districts.	Area of British Districts.	Number of Districts.	Area and Population of Districts				Number of Districts with a population exceeding one million
				Average Area.	Average Population	Maximum Area	Maximum Population	
Assam	5,841,878	52,959	13	4,074	449,875	Lushai Hills 7,227 Khasi Hills 6,027 Sylhet 5,443 Sibsagar 4,996	Sylhet 2,241,848 Sibsagar 597,969 Kamrup 589,187 Goalpara 462,052	1
Bengal	74,744,866	151,185	48	3,150	1,557,185	Ranchi 7,128 Hazariabagh 7,021 Mymensingh 6,332 Sonthal Parganas 5,470	Mymensingh 3,915,068 Daihbanga 2,912,611 Midnapore 2,789,114 Muzaffarpore 2,751,790	37
Bejar	2,754,016	17,710	6	2,952	450,003	Wnn 3,910 Basim 2,949 Buldana 2,809 Amraoti 2,759	Amraoti 680,118 Akola 582,510 Wnn 466,929 Buldana 423,616	None
Bombay	18,515,587	122,984	24	5,124	771,433	Karachi 14,296 Thar and Parkar 13,690 Khandesh 10,041 Hyderabad 8,291	Khandesh 1,427,382 Ratnagiri 1,167,927 Satara 1,146,559 Dharwar 1,113,293	5
Burma	9,252,875	168,573	36	4,683	257,024	Upper Chindwin 19,062 Myitkyina 10,640 Mergui 9,789 Amherst 7,062	Hanthawaddy 484,811 Henzada 484,558 Thongwa 484,410 Akyab 481,666	None
Central Provinces	9,876,646	86,459	18	4,803	548,703	Raipur 11,724 Chanda 10,749 Bilaspur 8,341 Mandla 5,047	Raipur 1,440,556 Bilaspur 1,012,972 Sambalpur 829,698 Nagpur 751,844	2
Madras	38,199,162	141,705	22	6,441	1,736,326	Nellore 8,761 Cuddapah 8,723 Madura 8,701 Kistna 8,498	Madura 2,831,280 Malabar 2,790,281 South Arcot 2,349,894 Tanjore 2,245,029	17
Punjab and N-W F Province	22,455,819	113,675	33	3,552	701,744	Kangra 9,978 Mianwali 7,816 Multan 6,107 Dera Ghazi Khan 5,306	Lahore 1,162,109 Sialkot 1,083,909 Amritsar 1,023,828 Hoshiarpur 989,782	3
United Provinces	47,691,782	107,164	48	2,283	963,579	Garhwal 5,629 Almora 5,416 Mizapur 5,223 Gorakhpur 4,596	Gorakhpur 2,957,074 Basti 1,846,153 Meerut 1,540,175 Azamgarh 1,529,785	23

DIAGRAM NO 1

Relation of Area and Population.

• • Each white diamond represents 1 per cent. of the total AREA of India.
Each black diamond represents 1 per cent. of the total POPULATION of India.

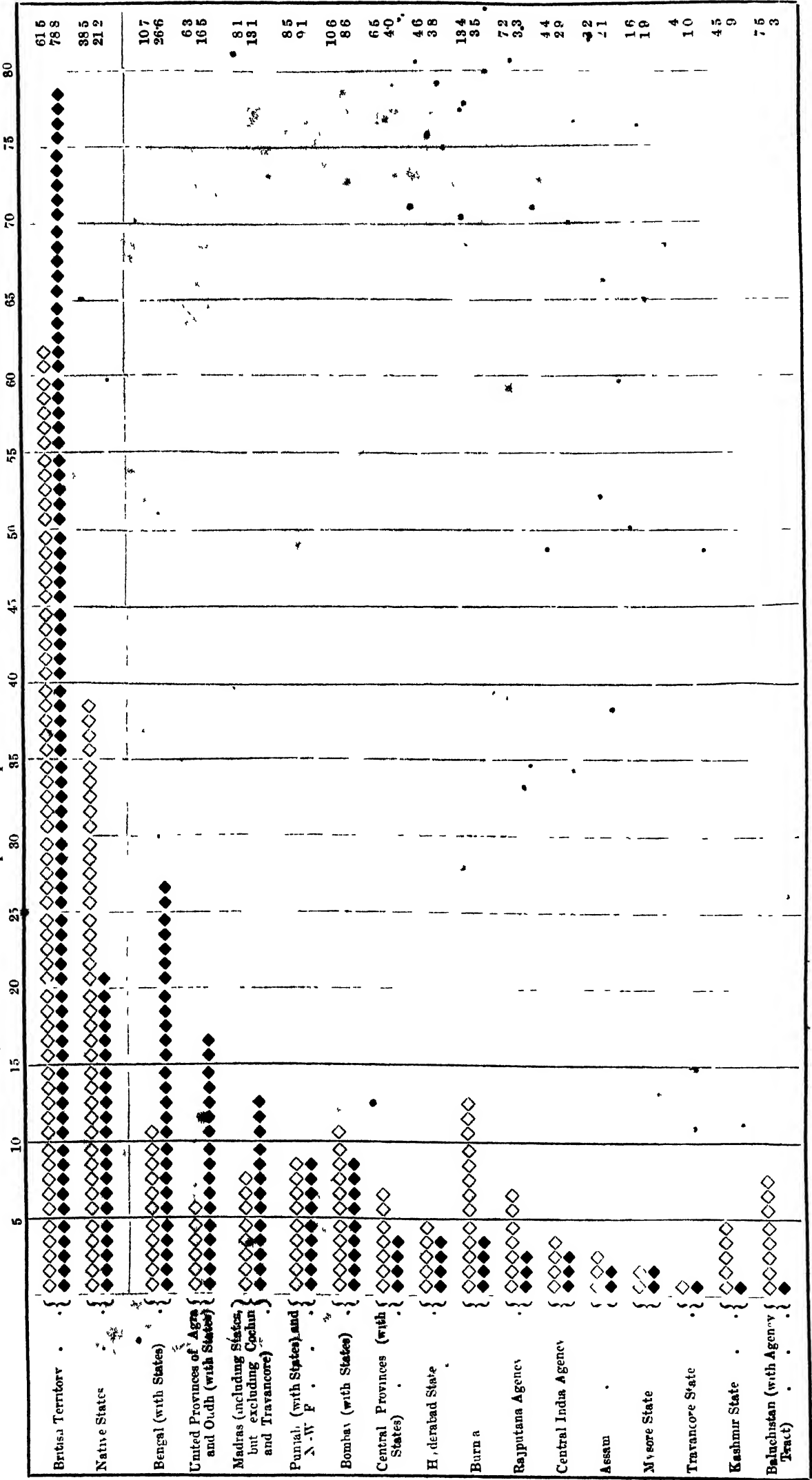


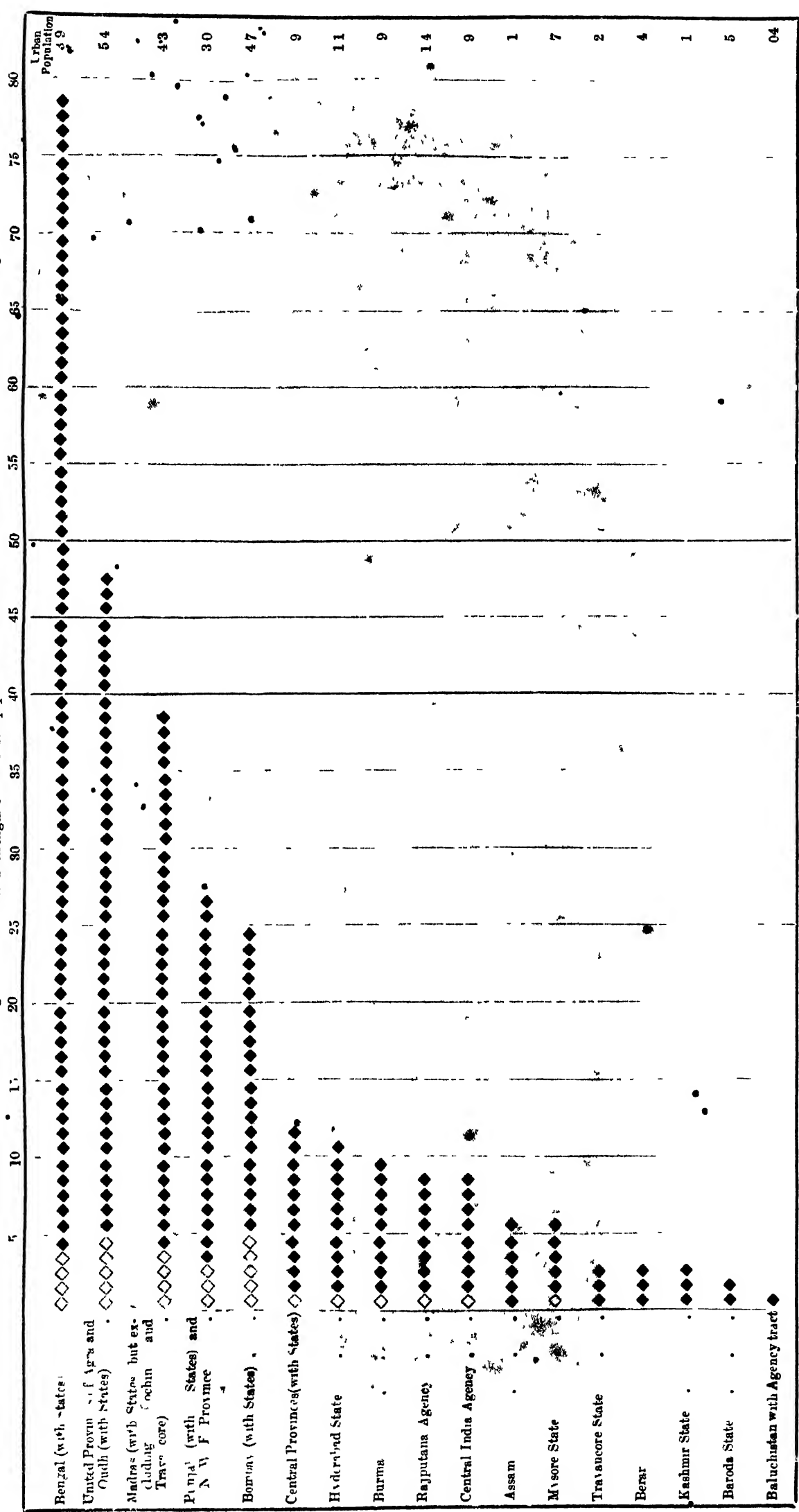
DIAGRAM NO. II.

Urban and Rural Population.

Each diamond represents a million persons.

The white diamonds stand for URBAN population and the black diamonds for RURAL population.

The figures show the actual strength of the Urban population in millions and decimals



CHAPTER II.

Movement of the Population.*Individual Provinces and States.*

90. In the last Chapter the results of the census have been discussed with reference to the population as it stood on the 1st March, 1901. The present Chapter will be devoted to the consideration of the changes which have taken place since the time of the first general census, which was effected over the greater part of India in 1872. The variations during the periods ending in 1881 and 1891 have already been dealt with in previous Census Reports; they will, therefore, be referred to very briefly here, and the discussion will be

Object of
discussion

(Year of)	Population.	Variation Per cent since previous census.
1872	206,162,360	
1881	253,696,330	+ 23.1
1891	287,814,671	+ 18.1
1901	294,361,056	+ 2.4

directed mainly to an examination of those which have taken place since 1891, and of the causes which have produced them. The census returns show a steady increase of population from 206,162,360 in 1872 to 294,361,056 at the present census, but the true rate of progress has been far smaller than would appear from these figures. The earlier enumeration left out of account the population of the Andamans and the Native States of Baluchistan, Central India, Hyderabad, Kashmir,

Rajputana, Sikkim, Manipur, and the Punjab, with a population, at the present time, of some thirty-eight millions, and it also, of course, failed to deal with areas not then included in British territory such as Upper Burma, British Baluchistan and certain outlying parts of Assam. Moreover, apart from the addition of tracts not previously counted, the first census was necessarily in many respects tentative and incomplete, and numerous omissions occurred, especially amongst travellers and in out-of-the-way places; even whole villages were sometimes lost sight of. In 1881, more elaborate precautions were taken, and the omissions were fewer in number, but the count was still not as thorough as it was in 1891, when, except in tracts newly added and in a few of the more backward Native States, a high standard of accuracy was reached which could not easily be surpassed. It follows that while part of the apparent increase on that occasion, and still more in 1881, was due to a more exhaustive enumeration, this disturbing influence had almost disappeared at the present census. But the conditions in different parts of India are far from uniform, and before attempting to disentangle from these artificial influences the true variations which have taken place and to examine the causes which underlie them for the Empire as a whole, it is necessary to deal with the results in the individual provinces and states of which it is composed. When these have been considered in detail, and only then, will it be possible to arrive at correct conclusions for the whole country.

91. The actual changes in the population of each province and state since 1872 are shown in Imperial Table II, and Table II-A shows the variation at the present census as compared with 1891 on the areas enumerated in that year. The different aspects from which the growth of the population can be regarded are illustrated by means of proportional figures in the following subsidiary tables at the end of the Chapter:—

Reference to
Statistics

Subsidiary Table I.—Variation in relation to density since 1872.

“ “ II.—Net variation since 1891.

“ “ III.—Variation in natural divisions.

“ “ IV.—Variation in districts classified according to density.

“ “ V.—Variation distributed by areas of increase and decrease.

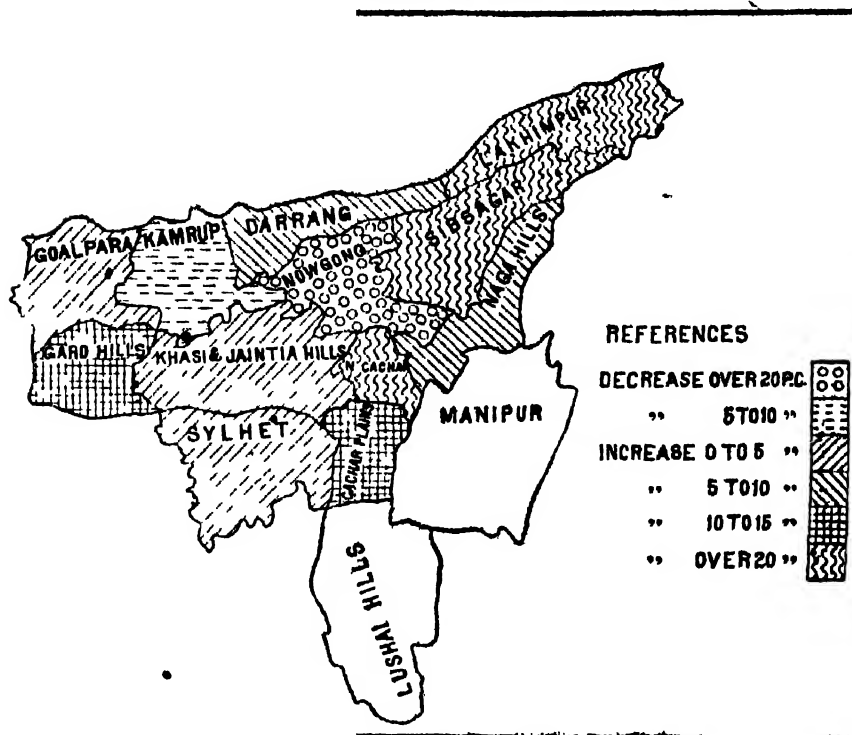
92. **Ajmer-Merwara.**—The small tract of British territory known as Ajmer-Merwara is administered by the Agent to the Governor General in

Rajputana, who is its Chief Commissioner. It lies in the middle of the Native States of the Rajputana Agency, and its circumstances are very similar to those which prevail there. Like them it suffered severely from famine in 1899-1900, but the measures taken to combat the calamity were more efficient. The consequence is, that while the loss of population in these States in the decade preceding the present census varied from 23 to 42 per cent., that in Ajmer-Merwara was only 12 per cent. The decrease took place entirely in rural areas, where it amounted to 18·6 in Ajmer and 11·6 in Merwara; the population of Ajmer City and other urban areas is greater by 5·6 per cent. than it was in 1891.

Summary of
results

93. **Assam.**—According to the statistics of Table II the population of Assam

Map of Assam showing the variations in the population since 1891.



Note — Manipur and Lushai Hills were not enumerated in 1891.

increased during the ten years preceding the census by 649,041 or nearly 12 per cent. But half of this increase comes from the Lushai Hills and Manipur. In South Lushai there was no census in 1891; in Manipur a census was taken, but the papers were destroyed in the insurrection. If we deduct the population of these areas, which have only a remote bearing on the general progress of the Province, the true increase will be seen to be 327,240, or just under 6 per cent. The figures must be qualified by

the remark that the number of persons born in Assam has increased by only 68,197, or 1·36 per cent.; while the foreign-born population shows the large increment of 259,043 or 50·85 per cent. The highest rate of increase, 11 per cent., is found in the hill districts, but this is due to the accident that the scanty population of the North Cachar Hills was more than doubled by the presence of over 20,000 persons employed on the construction of the Assam-Bengal Railway. The real increase in the hills was thus only 6·5 per cent., some of which may perhaps, in some tracts, be ascribed to improved enumeration. The Brahmaputra Valley shows an increase of 5·7 and the Surma Valley of 5·3 per cent. Taking the figures for individual districts we find in Lakhimpur, at the extreme north-east of the Province, the large increase of 117,343 persons or 46·1 per cent., 16 per cent. from natural growth and 30 per cent. from immigration. Although 41 per cent. of the population are foreigners the indigenous castes have shared in the prosperity which the district owes to its tea gardens and coal mines and have increased in number considerably. The growth of this district has been continuous and the population has trebled since 1872. The neighbouring district of Sibsagar shows an increase of 117,310 persons or 24·4 per cent. due in equal proportion to immigration and natural increase and traceable in either case to the influence of "a number of well-managed tea-gardens." Since 1872 Sibsagar has added 280,000 to its population or 88 per cent.

Kalá-nzāi

94. There are, unhappily, two marked exceptions to the example of progress set by Lakhimpur and Sibsagar and followed in a less degree by the other districts of Assam. A glance at the map will show that in the centre of the Brahmaputra Valley two districts are conspicuous for a decrease in their population. Nowgong has lost 86,147 people, or nearly 25 per cent. of the population recorded in 1891, while Kamrup has declined by 45,062, or 7 per cent. In both cases the chief cause of the decrease is the virulent and communicable

form of malaria known from the darkening of the skin, which is one of its symptoms, as *kalá-ázár* or the black sickness. This disease, which is probably identical with the Rangpur and Burdwan fevers and the *kálá-dukh* or *kálá-jwar* of Purnea and the Darjeeling terai, was first observed in the Garo Hills in 1869, when the Garos were so impressed with its infectious character that they "are said to have not only abandoned their sick, but to have stupefied them with drink and then set light to the houses in which they were lying in a state of helpless intoxication." By 1883 it had spread to the Goalpara sub-division which showed a decrease of 29,699 persons at the census of 1891. Five years later *kalá-ázár* entered Kamrup and reduced the population of the southern part of the district by nearly 12 per cent. Having spent its force there it passed on, in 1892, to Nowgong where its track is marked by deserted villages, untilled fields, a land revenue reduced by 23 per cent. and a disheartened population which, after 19 years of steady increase, has now receded to the figure at which it stood nearly 30 years ago. Mr. Allen thinks that the disease is dying out in Nowgong and that its advance up the Assam Valley seems to have been checked by the sparsely populated hills and forests which separate Nowgong from Sibsagar. This view is in accordance with the results of modern researches which go to show that a population decimated by malaria tends to acquire some degree of immunity and that the disease can only be transmitted through certain species of mosquitoes which flourish only under special conditions of soil and humidity and can in no case travel far from their original habitat. There can be little doubt that *kalá-ázár* has done much to retard the natural development of Assam. The tale of its extraordinary fatality has travelled far and has strengthened the traditional dread with which the people of Bengal and Bihar have always regarded a country where, if a man falls ill, he is likely to die in strange surroundings without any means of getting away. The isolation of Assam has had a great deal to say to its unpopularity. Independent cultivators have been deterred from settling on the spare land which awaits the plough and immigration has been restricted to the classes who are brought in under the Labour Acts and do not move on their own initiative. If effective railway communication were opened up with the congested districts of Bihar, advantage might be taken of the movement of the population eastward which seems to have set in and settlers might be found to occupy the holdings which *kalá-ázár* has left vacant.

95 Special interest attaches to those portions of the Provincial Report in which Mr. Allen discusses the decline of the indigenous population of Assam. That the Assamese are decreasing in number has long been surmised, but the extent of their losses could not be accurately stated owing to the difficulty of determining exactly what number of persons should be regarded as Assamese. Here the obvious tests of birth-place and language cannot be applied. A large proportion of the persons born in Assam are the children of coolie immigrants, and many of these habitually speak the Assamese language. In order therefore to distinguish the indigenous from the foreign population Mr. Allen has taken for the Brahmaputra Valley the statistics of 49 castes and tribes peculiar to Assam and has shown in a subsidiary table the variation in their numbers during the last ten years. The broad facts are that in the five upper districts of the Valley the Assamese have decreased from 1,608,257 to 1,504,847 or by 6.4 per cent. In Nowgong the loss is 31 per cent., in Kamrup 9 per cent. and in Darrang 6 per cent., while Lakhimpur shows an increase of 20 per cent. and Sibsagar of 9 per cent. Some part of the increase in the latter districts is no doubt due to the immigration from the former, but most of it is the outcome of natural growth and, bearing in mind that the area of decrease is also the area which has been swept by fever and injuriously affected by the earthquake of 1897, we need feel no hesitation in accepting Mr. Allen's conclusion that "if the Assamese can increase rapidly, at the upper end of the Valley, it is only reasonable to suppose that when *kalá-ázár* has finally disappeared, they will at any rate stop decreasing in Kamrup, Darrang and Nowgong."

Decline of
indigenous
population

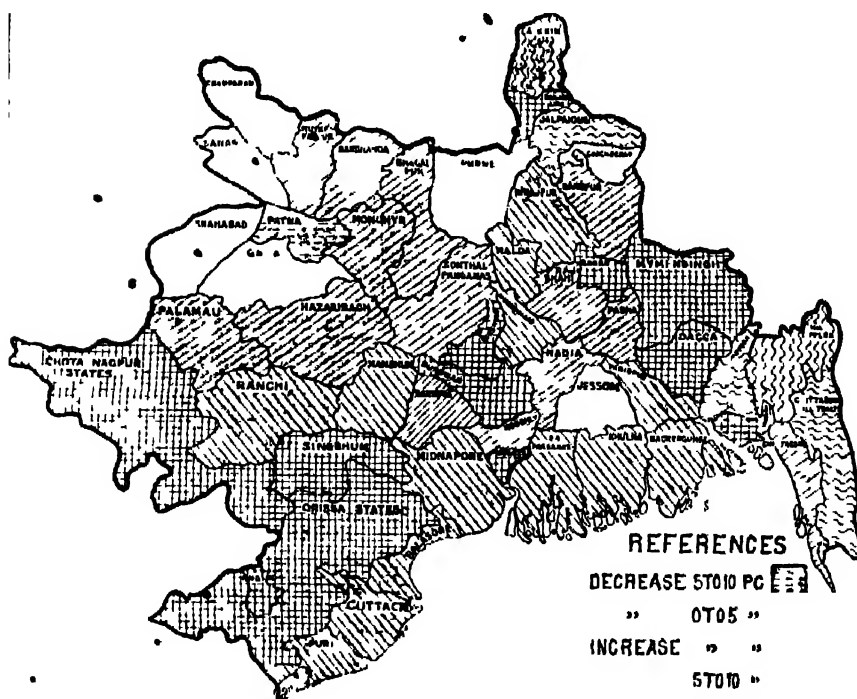
96. **Bengal.**—The second chapter of Mr. Gait's report contains an exhaustive and interesting discussion of the variations of the population in every district of Bengal to which I must refer those who wish to make a detailed

Early esti-
mates of
population

study of the development of the Province during the last thirty years. Here I can only deal with the larger movements of the people and the more general causes which appear to have determined them.

The earlier estimates of the population of Bengal were mainly guess work

Map of Bengal showing the variations in the population since 1891.



and with one exception fell greatly short of the truth. In 1765 it was supposed to be 10 millions. Twenty years or so later Sir William Jones put the population of Bengal, Bihar and Orissa with Ghazipur, Benares, Jaunpur and part of Mirzapur at 24 millions. In 1792 Colebrooke assumed 30 millions. Mr. Adam, when writing on vernacular education in 1835, placed the population at 35 millions on the basis of some very imperfect official returns called for by Lord Wellesley in 1801. Thornton's Gazetteer of 1858

gives an estimate of 40 millions for British territory without the Native States, Darjeeling and Duars, and 42½ millions was the figure officially accepted up to 1872. Where the margin of error is so large it would be waste of time to enquire how the estimates were framed. Mention should however be made of the curious fact that in the course of the statistical survey of parts of Bengal, which he conducted between 1807 and 1814, Dr. Francis Buchanan made a laborious attempt to calculate the population of six districts of Bihar and Northern Bengal and arrived at results exceeding by about half a million the figure ascertained for the same area in 1872. Dr. Buchanan seems to have argued from the cultivated area to the number of ploughs, and to have assumed that each plough represented five persons. To the number of cultivators thus arrived at, he added varying proportions for the other classes of society locally recognised. In some cases he also estimated the gross agricultural produce and the amount exported and calculated the number of persons required to consume the quantity that remained in the district. He relied, however, mainly on the number of ploughs. The account of the Survey published in 1838 by Mr. Montgomery Martin under the title *Eastern India* throws no light on the methods by which the initial data were procured, nor does any one seem to have attempted to calculate the population of the entire Province from Dr. Buchanan's estimate of the tract surveyed by him. With a fair knowledge of the relative density of different parts of Bengal it ought to have been possible to improve greatly on the official estimate of 42 millions.

Summary of
movements
from 1872 to
1901

97. The census of 1872 came as a surprise to everyone. It disclosed a population of over 62 millions or about 24 millions more than the population of the United States as it then stood. Between 1872 and 1901 the statistics of the four censuses show an increment of 16 millions or nearly 26 per cent. In the first nine years of the period the rate of increase recorded was 11·5 per cent; between 1881 and 1891 it dropped to 7·3; while in the last ten years it has been only 5·1 per cent. This progressive decline is traceable in some degree to the inevitable defects of the first and second enumerations, which were especially imperfect in the outlying parts of the Province. As each successive census supplies the omissions of its predecessor, the ratio of increase necessarily tends to fall off. In 1872 the census of the British districts of

Chota Nagpur was carried out gradually during the cold weather months by a body of clerks who were supposed to travel from village to village and record the resident population. But no effective check could be kept on their proceedings, and it can hardly be doubted that the returns for the less accessible places were too often based upon no more solid foundation than the treacherous memory of the village watchman. The Tributary States of Chota Nagpur and Orissa were enumerated under the supervision of their own chiefs. In parts of the Sonthal Parganas the census was carried out by means of seeds or small stones or by tying knots in coloured strings. The first synchronous census of these tracts was taken in 1881, and the increase of 32 per cent. then brought out is due rather to improved enumeration than to a rate of natural growth hardly credible in a poor country which was then the chief recruiting ground for the tea gardens of Assam. Though the Chota Nagpur plateau furnishes the most striking instance of the inaccuracy of the census of 1872, the returns of that year were also imperfect in Jessore, Jalpaiguri, Darjeeling, Mymensingh, Hill Tippera and Darbhanga, in all of which the increase shown in 1881 is to a great extent fictitious. There were probably also some omissions in the British districts of Orissa, but a large proportion of the increase of 17·6 per cent. which was recorded in 1881 may fairly be ascribed to the recovery of the population after the severe famine of 1866. The decline of nearly 3 per cent. in West Bengal during these years was caused by the epidemic of Burdwan fever which ravaged the alluvial tracts of the division and was estimated at the time to have caused about two million deaths besides materially impairing the reproductive capacity of the population.

Of the ten years 1881-91 there is little to be said. The population of the Province increased by 7·3 per cent. Eastern Bengal shows a growth of 14 per cent., due for the most part to natural causes connected with its great advantages of soil and climate. The increase of 13·5 per cent. recorded for the Chota Nagpur plateau probably represents some substantial omissions in the census of 1881, when disturbances took place in the Sonthal Parganas and a widespread sense of alarm and uneasiness was caused by rumours as to the object of the enumeration which were traced to a wandering ascetic.

98. The population recorded in Bengal on the present occasion was 78,493,410; 74,744,866 in British territory and 3,748,544 in the Native States. The increase since 1891 comes to 3,819,612 or to 5·1 per cent. made up of 3,397,905 or 4·7 per cent. in British districts and 421,707 of 12·6 per cent. in the States. Among the natural divisions of the Province, Eastern Bengal comes first with an increase of 10·4 per cent.; Chota Nagpur has 7·8; West Bengal and Orissa 7; North Bengal 5·9 and Central Bengal 5·1 per cent. In North Bihar the population is virtually stationary and in South Bihar it has declined 3·6 per cent.

Before reviewing the fluctuations in the natural divisions we may glance briefly at the movement of population in the entire Province during the last twenty years. Taking 1881 as a starting-point we arrive at the following results :—

Census Increase 1881-1891	.	.	.	.	.	5,136,858
Census Increase 1891-1901	.	.	.	.	.	3,819,612
					Difference	1,317,246

• But it may be said that a substantial share of the increase in the first period is fictitious, being due merely to improved enumeration. Mr. Gait deducts half a million on this account, but would leave the second figure as it stands, holding that there is nothing to choose in point of accuracy between the last two enumerations. In the last decade he allows for the operation of two exceptional causes. He takes plague mortality at 150,000 or more than twice the recorded number of deaths (65,884) up to the date of the census; and estimates the loss of life from the cyclone of 1897 at 50,000. This gives us the following figures —

Probable true increase 1881-1891	.	.	.	.	.	4,636,858
" " " 1891-1901	.	.	.	.	.	3,819,612
Difference	.	.	.	.	.	817,246
Deduct for plague and cyclone	.	.	.	.	.	200,000
Probable natural difference	.	.	.	.	.	617,246

It would be hopeless to attempt to disentangle the causes to which this difference is due. Increased emigration, enhanced mortality, reduced birth-rate,

all may have had their share in the result. As to emigration Mr. Gait observes that there has been "a considerable net increase, chiefly in the direction of Assam, but it does not appear that it has been greater during the last decade than it was in the preceding ten years." But the exclusion of this factor does not help us materially to determine the relative influence exercised by the other two. The evidence of the vital statistics is obscured by the uncertainty as to the degree of improvement that may have resulted from emigration, to which much attention has been paid of late years in Bengal. Our figures are not accurate enough to enable us to say how much of a given result can be put down to variations of births or deaths in either direction. It is, however, extremely probable that the reduction in the rate of increase of the population is very largely due to a decline in the birth-rate induced by the general rise in the prices of staple food grains. Mr. O'Connor's statistics of prices and wages show that the average price of common rice in Bengal has risen by 35 per cent. since the year 1890. In South Bihar common rice is dearer by 20 per cent., maize by 32 per cent., and wheat by 29 per cent., while during the same period the wages of agricultural labourers have fallen by 3 per cent. Conditions such as these can hardly fail to affect the reproductive energy of the large class of unskilled labourers who own no land and have not participated in the profits arising from the enhanced prices of agricultural produce. Nor are they confined to South Bihar. They extend in varying degrees to all parts of Bengal and although their influence on the birth-rate may not always be traceable we may be sure that it is there.

Movement in
relation to
density

99. Subsidiary table III appended to Chapter II of the Provincial Report gives an interesting view of the actual and proportional variation of population in relation to density in different parts of Bengal. For the province as a whole the absolute and proportional increase of population is greatest in tracts where the density is below 300 persons to the square mile. These show an increase of 1,003,219 persons or 8·6 per square mile. Next in order come tracts with a density of from 500 to 600 which have increased by 440,263, but in these the relative increase is only 4·6 per cent. while the areas with a density of from 900 to 1,000 have gained nearly 7 per cent. On analysing the figures by natural divisions it appears that the sparsely peopled territory owes its growth to the filling up of spare land in Chota Nagpur and the Sub-Himalayan tracts and the reclamation of the Barind in Northern Bengal. "If Chota Nagpur and North Bengal be left out of account, the greatest absolute addition to the population during the last decade has occurred in *thanas* with a density of 500 to 600 persons per square mile. In East Bengal the greatest absolute increment has taken place in *thanas* with 800 to 900 persons per square mile, and the greatest proportional growth in these with from 400 to 500, and then in those with from 900 to 1,000." On the whole it seems to be clear that the pressure of population on the land in Bengal has not generally reached the point at which immigration begins to be checked and the struggle for existence re-acts on and diminishes the reproductive instinct. The densely peopled tracts of Bihar may perhaps form an exception. Here we have extensive emigration combined, in South Bihar, with a decline, both absolute and relative, in the population of the most crowded tracts. In North Bihar the statistics are more ambiguous and there is a substantial increase in the *thanas* with a population of from 800 to 1,000. But in both divisions the conditions were abnormal, especially at the close of the decade, and it is doubtful whether any probable inference can be drawn from the results of the census.

Movement
by natural
divisions—
East Bengal.

100. The causes of the growth of population in Eastern Bengal are not far to seek. The rainfall is copious and regular; the soil is naturally fertile and is renewed year after year by the action of the great rivers which overflow their banks at regular intervals and cover the country with a rich deposit of silt. The climate is on the whole a healthy one. The people are sturdy and virile specimens of the Mongolo-Dravidian type; they have profited enormously by the rise in general prices and the introduction of jute; their standard of living is high and prosperity has engendered in them a spirit of independence which finds its expression in various forms of violent crime. Throughout the division the proportion of increase is remarkably uniform. In Bell Jangra it is raised by immigration to 26 per cent., while in Chittagong it has been reduced to 4·8 by the cyclone of 1897 and the outbreak of cholera which followed in its track.

No signs of pressure on the means of subsistence can be discerned, and it is shown in the table already quoted that the population has grown most rapidly in the areas which are most densely peopled.

101. On the Chota Nagpur plateau, and more especially in the districts of Ranchi and the adjacent regions, mining was very active during the decade and the census shows a very marked increase of 14 per cent. The collieries and tea gardens attracted a large population from the Native States in the south and west, and the increase of 13 to 14 per cent., which is probably due to the influx of immigrants, is quite extraordinary.

102. In West Bengal the increase is 7 per cent., varying from 13 per cent. of natural growth in Bhadram, which is recovering from a cycle of malaria, to 1·4 in Hooghly, where fever is rife and the population would have been stationary but for the influence of the mills and factories of Serampur. Howrah owes its increase of 11·3 to the influx of mill-hands, who form something like 17 per cent. of the population, while the growth of the western portion of Burdwan, where one-third of the inhabitants are foreigners, is due to the attraction of the coal mines.

103. Central Bengal gains 5 per cent. on the whole. Mills and reclamation of Sundarban swamps add nearly 10 per cent. to the 24-Parganas; rivers blocked by silt and lines of stagnant swamps explain the decline of 4 per cent. in Jessore and the small increase of 1·4 per cent. in Nadia. The addition of 24·2 per cent. to the population of Calcutta has been dealt with in the last chapter.

104. Northern Bengal has an increase of nearly 6 per cent. It is largest in Jalpaiguri (15·6) where ordinary cultivation has expanded and the tea gardens of the Duars attract a foreign-born population of from 28 to 55 per cent. The increase of 11·5 per cent. in Darjeeling is due to the influx of cultivators from Nepal, while Bogra owes a similar increment to the industrious Santals, who are reclaiming the laterite ridges of the once fertile Barind from the jungle which had been allowed to overrun it.

105. There remain two divisions in which population has remained stationary or has actually declined. In North Bihar, where one person per thousand has been added to the population during the decade, famine prevailed in five out of six districts during 1896-97. Yet no correspondence can be traced between the prevalence of famine and the fluctuations of population. "The stress of famine," says Mr. Gait, "was greatest in Darbhanga, but this district shows the largest gain of population (3·9 per cent.). Purnea escaped the famine altogether, but it has sustained a loss of 3·5 per cent. or exactly the same as Champaran, where the decline is greatest in the very tract that suffered least from famine. Saran, which has a decrease of 2·2 per cent., was far less severely affected than Muzaffarpur, which has gained 1·5 per cent. and its loss of population is amply accounted for by the plague epidemic which was more virulent there than in any other district except Patna; the Gopalganj subdivision where the famine was worst has added slightly to its population of 1891. In Muzaffarpur and Darbhanga, the great rice-growing tracts under the Nepal frontier, which suffered most in the famine year, show the greatest growth of population. The decadent tracts in Muzaffarpur and Bhagalpur either escaped the famine altogether, or suffered from it only in a minor degree. The true causes of the decay in parts of North Bihar must, therefore, be sought elsewhere. Champaran and Purnea are well known to be unhealthy and have suffered since 1891, not only from malarial affections, but also from severe epidemics of cholera. The outbreak of this disease in Purnea in 1890 was of unparalleled severity and no fewer than 43,340 deaths were laid to its account in the annual returns of mortality. A great part of Bhagalpur that has lost population borders on Purnea and shares the malarial fevers of which that district is the victim. In Saran, as already stated, the plague fully accounts for the decrease which is greatest where that disease was most prevalent.

"Saran is the only one of the plague districts except Saran, and its decrease of 3·6 per cent. is due to the direct and indirect losses caused by the epidemic, the flight of a great part of the immigrant population, the failure of the census staff to effect an enumeration of the population, except in the west of Shahabad, the areas of greatest decadence being those with the areas that have suffered most from plague, and tracts that have been free from the disease have, as a rule,

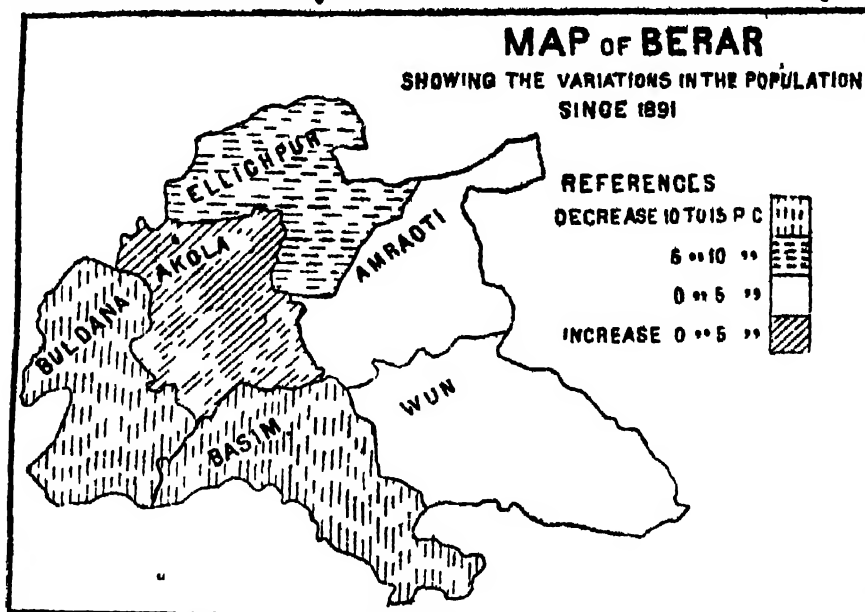
added to their population. Prior to the census the epidemic had been most virulent and most widespread in Patna, where the population has declined by 8·3 per cent. as compared with 1891. The loss is greatest in the thickly populated urban and semi-urban country on the bank of the Ganges where the mortality due to plague was greatest. The southern part of the district which suffered least from plague has almost held its ground.

Summary of
movements.

106. Berar.—After fifty years of almost unbroken prosperity Berar was visited during the ten years preceding the last census by two famines, which followed each other in close succession and reduced the population by 143,475 persons or 4·9 per cent. In 1867 when the first census was taken the people numbered 2,227,654; by 1881 they had increased to 2,672,673 and by 1891 to 2,897,491. In 1901 the population had fallen to 2,754,016.

The famine
of 1896-97.

Everywhere, except in the hilly tract of the Satpura range known as the Melghat taluk, the famine of 1896-97 was due rather to an inordinate rise of prices than to actual scarcity of food. It was felt most severely by the large class of field labourers for whom there was no work and by the half starved immigrants who flocked in from the Central Provinces and helped to swell the death roll. Although the death-rate of Berar rose in this year from 37·6 to 52·6 per thousand, there were few deaths from starvation among the natives of the Province, except in the Melghat. Here the failure of crops was



complete; there were no stores of grain to fall back upon; the jungle tribes—Bhils, Korkus and Gonds—were too shy, too inert, and too unused to regular labour to come on to the relief works, and a considerable number of them admittedly died of want. The famine of 1899-1900 was a calamity of a more formidable type, brought about by the great atmospheric movements which determine the variations of the monsoons. Not only did both the autumn and spring crops fail completely; there was also a dearth of fodder; the stores of grain which are still habitually maintained had been exhausted in 1897 and not replenished in the following year, and, to complete the disaster, the sources of water-supply dried up and a large number of cattle perished from thirst. The death-rate rose from 40 to nearly 83 per thousand; the birth-rate fell from 50 to 31. The number of deaths returned was 236,022, being nearly 126,000 in excess of the decennial average, and nearly four times as many as occurred in 1898. Some of these people no doubt were immigrants from the neighbouring parts of Hyderabad, but no estimate of their number can be made, and it is impossible to doubt that there was considerable mortality among the inhabitants of the Province. The daily average number of persons relieved was 265,744 or 9·2 per cent of the population, while in July 1900 the figure rose to 601,424 or nearly 21 per cent.

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Comparison
of census
figures with
vital
statistics

107. In respect of the accuracy of its vital statistics Berar ranks higher than almost any Province in India and a comparison of the census figures with the returns of births and deaths fully bears out this reputation. The recorded excess of deaths over births during the ten years 1891-1900 comes to 150,803 persons, while the census shows a loss of 143,475. And a calculation made by Mr. Chinoy, in paragraph 80 of his report, from the vital statistics combined with the birth-place returns, brings out a total population of 2,750,542 persons or only 3,474 less than that ascertained in the census. Another form of calculation, set out in subsidiary table VI, compares the population actually found in the census with that which would have been in existence if the rate

of increase which prevailed from 1881 to 1891 had gone on for the next ten years. On this hypothesis, which takes for granted the continuance of unbroken agricultural prosperity, "we find that Berar has, during the decade, suffered a loss of 367,224 persons, or 12·8 per cent. But the vital statistics and the nature of the famine during the decade show that in only five years, *i.e.*, from 1891 to 1896 and 1896 and 1899 the population was progressive, as there was a large excess of births over deaths in each of those years, while in the remaining five years deaths outnumbered births excessively. Taking the normal annual rate of increase in Berar for the five years in which the population was progressive and adding the net gain of 14,215 by migration, the population of Berar in 1901 should have been 3,031,120, or 277,104 more than it was actually found. This difference amounts to 10 per cent., and is probably the nearest we can get to the loss inflicted by the two famines and unhealthy years."

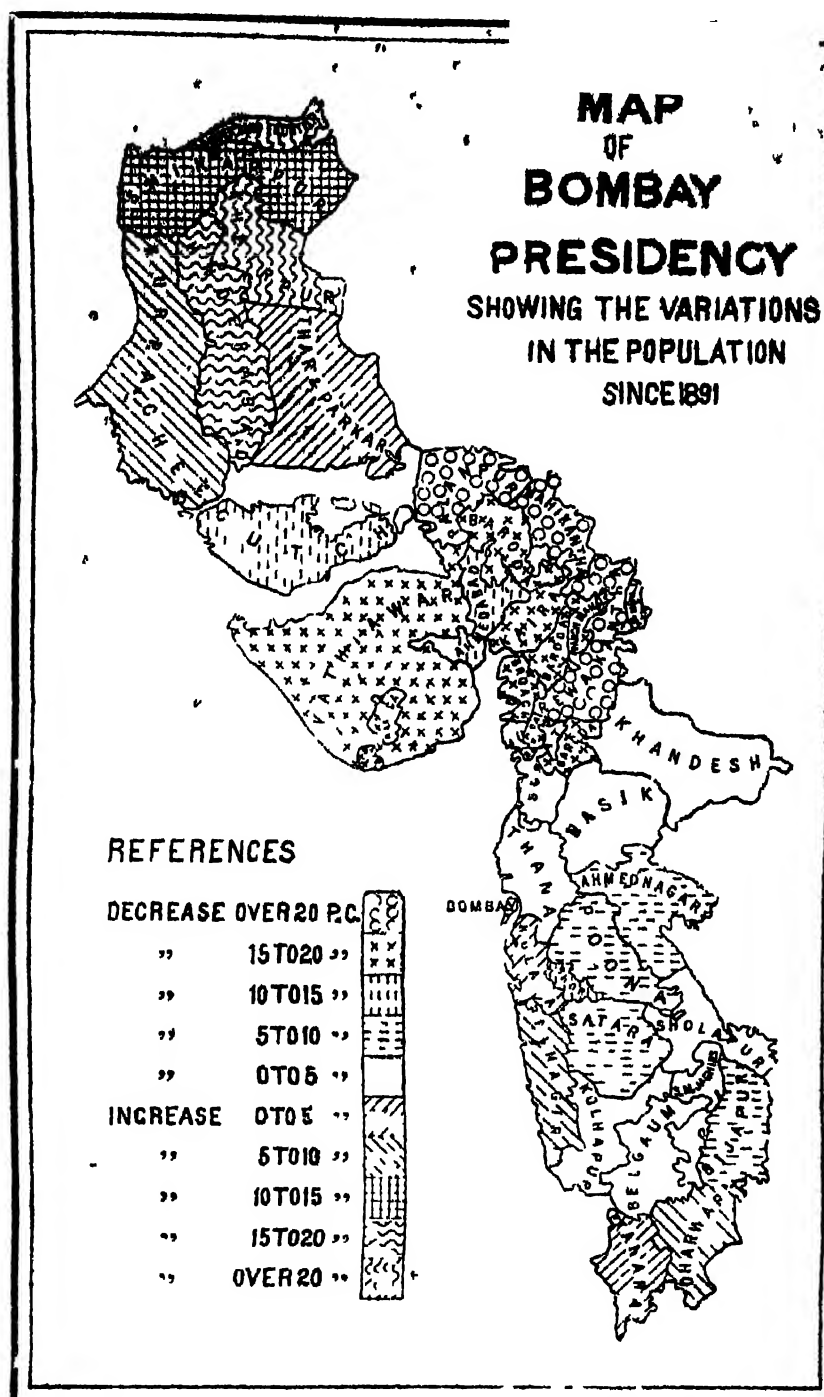
108. It is impossible to determine with any approach to certainty to what extent the two factors—reduction of births and increase of deaths—contributed to the decrease of population. Nor can we say how many people were actually living in Berar at the time when famine declared itself. But the age statistics contained in Imperial Table VII show very clearly that excess mortality arising from famine, and from the diseases which accompany famine, must have played a very large part in producing the results which the census tables record. Proceeding on broad lines, so as to neutralise the characteristic defects of the statistics, we find that in 1901 the number of children under ten in Berar was less by 154,208, or 38·2 per cent., than it was in 1891. It will also be seen that the number of persons between 50 and 60 declined by 11,703 or 14·2 per cent., while in the period "60 and over," the reduction amounted to 47,673 or 27·2 per cent. For the ages under 5 the vital statistics show that 515,127 births were registered in Berar during the five years 1896—1900. Of these children, only 287,986 were surviving in March 1901 and 257,141 or 47 per cent. had died. Bearing in mind the untrustworthy character of the data, I refrain from pursuing the comparison for individual years. The broad facts speak for themselves. Excessive mortality among the very young and a high, though less striking, death-rate among the old are the inevitable consequences of famine on a large scale. Even if there are no deaths from actual starvation, the weaker members of the population are bound to succumb in large numbers to the fever, which is always present, and to the special diseases, cholera, dysentery and diarrhoea, which the abnormal conditions tend to produce. But if the Berar age tables bring out these necessary limitations of famine relief, they equally illustrate the great improvement in famine administration which we owe in the main to the Commission of 1880. The chief feature which distinguishes a modern famine, not only from the earlier famines vaguely noticed in history, but also from such disasters as attacked Orissa in 1866 and Madras in 1877, is the fact that in the earlier famines starvation assailed all classes and all ages of the community. The weakest doubtless suffered most, but the strong did not escape, and the deaths among adults of both sexes were numerous enough to leave their traces on the birth-rate for years to come. A glance at the Berar figures show how great an advance has been made on the earlier state of things. For the two sexes taken together, the reproductive ages generally show an increase, and the great decline of population is limited to the very young and the very old. The birth returns confirm this view. The people recovered rapidly from the famine of 1897 and the number of births, which fell in 1898 to 89,414, rose in the next year to 144,034, the highest figure ever recorded in Berar.

109. **Bombay.**—At the time of the first census in 1872 the population of the Bombay Presidency, including Aden, was 23,099,332, *viz.*, 16,301,280 in British territory and 6,798,052 in the Native States*. In 1876-78, the whole of the Deccan and South Maráthá country was severely affected by a famine which is estimated to have caused 800,000 deaths in excess of the usual number. As a consequence, in spite of better enumeration, the growth of the population registered in 1881 was barely a third of a million. In the next decade the

Movements
up to 1891

* The Native State of Baroda lies wholly within Gujarát and is much intermixed with the Bombay districts in that tract, but its population has been dealt with separately as it is in direct political relation with the Government of India.

conditions were far more favourable. There was no famine, and not even a



particularly bad harvest, and there were no specially severe epidemics. The population, therefore, grew rapidly and by 1891 it had risen to 26,960,421, to which British territory contributed 18,878,314 and the Native States 8,082,107. The proportional variation was 14·4 per cent. in British territory and 16·5 per cent. in the Native States, or 15 per cent. in the Presidency as a whole.

110. During the last decade there has been a considerable growth of industrial activity. The number of cotton mills has risen from 87 to 138 and the number of employes from 81,000 to 108,000. There has also been a considerable extension of the system of railways. But these conditions have only a small influence compared with the state of agriculture and the public health. For some years after 1891 the seasons were normal and, with the

exception of occasional visitations of cholera, there was no unusual mortality, but then followed "a succession of famines, bad seasons and plague epidemics unrivalled in the recent history of any other part of India."

Plague first appeared in Bombay City in September 1896, and gradually spread all over the Province, especially in the Deccan and the South Maráthá country, and in Thána, Cutch and the larger towns in Sind—Karáchi, Hyderabad, and Sukkur. The total registered mortality from plague up to the 1st March 1901, the date of the census, was nearly a third of a million. The Superintendent has not given his opinion as to the extent to which these figures indicate the actual mortality, but it is well known that in the case of all serious outbreaks of epidemic disease the machinery for reporting vital occurrences becomes disorganized. The Plague Commissioners were of opinion that the true death-rate from plague was greater by at least 35 per cent. than that actually reported, and in Bengal it has been estimated that the deaths from the disease were more than twice as numerous as those shown in the returns; it would thus probably be safe to say that in Bombay the plague was responsible for a reduction in the population of from half to two-thirds of a million persons.

At the time when the census was taken plague was raging in the Bombay City and in the Belgaum and Thána districts; in the plague districts of Bengal it was found that the consequent alarm and confusion affected the accuracy

Conditions
affecting
movement
between 1891
and 1901

of the enumeration, but in Bombay Mr. Enthoven thinks that the plague was a help rather than an obstacle, as the days of scare were over and the people were accustomed to constant censuses for plague purposes. However that may be, it is probable that the Bhils and other wild tribes, who rubbed off much of their shyness on the famine-relief works, were more completely accounted for on the present occasion than at any previous enumeration.

The famine of 1896-97 fell most heavily on the Deccan districts and Bijapur. In the rest of the Presidency the scarcity did not amount to famine, and relief works were not necessary, but there was widespread suffering from the high prices which prevailed. During the next two years the crops seem to have been fair, except in the Deccan, but then came the famine of 1899-1900. This calamity, following as it did on a succession of lean years, caused even greater distress in the Deccan than its predecessor of 1896-97, but the brunt of it fell on the well cultivated and usually fertile plains of Gujarát, "the garden of Western India," which until then had been regarded as outside the famine zone.* Sind, owing to its dependence upon irrigation, again escaped, and so did the Konkan and South Maráthá Country. The area affected on this occasion was nearly twice as great as in the famine of 1876-78 and the maximum daily average number of persons relieved was three times as great. When the census was taken over 100,000 persons were still in the relief camps.

Excluding Aden the number of immigrants of all kinds has fallen from 988,080 in 1891 to 804,014 at the present census, and that of emigrants to other parts of India from 706,542 to 626,799.

The result of the adverse conditions of the decade is that the census of 1901 shows a decrease of a million and a half, or 5 per cent., as compared with that taken ten years previously; the population of British territory has fallen to 18,559,561, a drop of 2 per cent., while that of the Native States is now only 6,908,648, or 14 per cent. less than in 1891. The returns of the Sanitary Department show an excess of births over deaths to the extent of 645,000 in the first six years of the decade, and of 47,000 in the years 1898 and 1899, while in the two famine years, 1897 and 1900, there was an excess of deaths amounting to 120,000 in the former, and 813,000 in the latter year.†

111. Mr. Enthoven has discarded in his report the arrangement of the statistics by natural divisions adopted by Mr. Drow in 1891, but in dealing with the variations in the population that have occurred it seems convenient to take them as the basis of the discussion. The changes which have taken place in each of these divisions during the last two decades, are noted in the margin. The figures refer

Natural Division.	Variation in population per cent.		
	1891-1901.	1881-1891.	1872-1881
Bombay City	-5.5	+6.3	+20.0
Gujarát	-13.0	+8.4	+1.5
Konkan	+2.4	+9.5	+3.6
Deccan	-4.8	+17.0	+1.3
Karnátak	-0.6	+19.9	-13.3
TOTAL PRESIDENCY PROPER . .	-4.1	+13.7	-0.2
Sind	+11.7	+19.0	+9.5
TOTAL BRITISH TERRITORY . .	-1.7	+14.5	+1.1

to British territory only. Those for the Native States will be discussed separately.

112. It will be seen that while all other parts of Bombay have suffered a loss of population, Sind has progressed satisfactorily. Shikarpur has grown by 12, Hyderabad by 15, and the Upper Sind Frontier by no less than 33 per cent. In the last mentioned district the phenomenal development is attributed to the extension of irrigation, and the same explanation applies also to Shikarpur, though to a more limited extent. The number of immigrants to this fertile province, whose chief complaint is the want of agricultural labour, is now 294,272, or more by 25 per cent. than in 1891. The construction of railways from Hyderabad to Rohri and Jodhpur has doubtless been

* That is to say at the present day. The terrible famine which devastated Gujarát in 1630 was probably one of the most severe of those scourges that ever visited India.

† In the Memorandum on the Material Condition of the people of Bombay Presidency 1892-1901, it is said that plague and famine by increased mortality and reduced birth-rate caused a loss of two and-a-half millions in British territory and of two millions in the Bombay States.

a great factor in encouraging this movement. Many of the new settlers have come from Rajputana. The number of emigrants from this part of the Presidency is very small.

113. With the exception of Surat where there is a decline of only 2 per cent., all the districts in Gujarāt show a serious loss of population, varying from 14 to 18 per cent. The results are equally bad for the Native States of Cutch and Kathiawar and they are even worse in the case of Baroda, which, however, will be dealt with separately. The density of population, though greater than that of other parts of Bombay, is not remarkable for a fertile alluvial tract, and the number of persons to the square mile is less than a third as great as in some of the more highly cultivated districts of Bengal. This tract suffered comparatively little from plague and it was not seriously touched by famine until 1899-1900.

There can be but little doubt that the famine of this disastrous year, falling as it did on a population heavily in debt to the money-lenders, is the main cause of the startling loss of population disclosed by the census. From the

District	Immigrants		Emigrants	
	1901.	1891.	1901.	1891.
Ahmedabad	128,549	155,124	60,641	99,861
Broach	26,973	31,037	15,289	23,481
Kaira	55,051	79,109	48,002	74,417
Panch Mahals	26,864	43,211	8,605	20,935
Surat	44,595	40,770	82,335	119,088
TOTAL	282,031	354,311	214,872	337,782

Note.—Migration from one district of Gujarāt to another has been left out of account in this statement. The figures for migrants refer only to other parts of the Bombay Presidency and Baroda. Information regarding migration to other parts of India is available only for the Bombay Presidency as a whole.

summary of the birth-place statistics given in the margin it will be seen that there has been a decrease in the number both of immigrants and of emigrants, but especially of the latter; if anything, there has been a net gain rather than a loss on account of migration, and in any case it is certain that no appreciable part of the diminution in the population which the census has brought to light can be attributed to these movements of the people. On the other hand, the vital statistics tell a terrible tale. Mr. Enthoven is of opinion that "the record of deaths in a famine year is very incomplete," but even as they stand the figures are sufficiently appalling. In the Panch Mahals in 1900 the recorded deaths numbered 88,079, or considerably more than in the preceding nine years taken together, and very nearly a third of the total population of the district according to the census of 1891.* In Ahmedabad the mortality of the single year 1900 was 20, in Broach 19, and in Kaira 18, per cent. At the same time the birth-rate fell to half, or less than half, the average of the decade. It has been said that part of the mortality was due to the extensive immigration of famine refugees from the neighbouring Native States. The Famine Commission of 1901 observed that Gujarāt is interlocked with native states and that there was overwhelming evidence to show that immense numbers of refugees came across the border in extreme destitution to seek relief in British territory. Many crawled over the border only to die. The effect of this immigration upon the death-rate was "very great," but, judging from the loss of population disclosed by the census, it would seem that the artificial inflation of the returns, due to the inclusion of deaths amongst foreigners, must have been more than counterbalanced by defective reporting of deaths in the local population in a season of unprecedented suffering and general administrative derangement.

114. Compared with the terrible ravages wrought in Gujarāt by a single year of famine, the districts of the Deccan, which in the quinquennium between 1896 and 1900 endured two famines and suffered from short crops in the other

* It may be explained for the benefit of readers in Europe that only a very small portion of the mortality in a famine is attributable to actual starvation. A great part of it is due to epidemics, especially of cholera, occasioned by the collection of large numbers of persons on relief works and the pollution of the water supply. A great part is also due to dysentery and diarrhoea caused by the eating of unwholesome food or by general debility. Moreover the better classes, everywhere, and almost all classes in India where famine is infrequent, avoid the Government relief works so long as they possibly can, and it often happens that by the time they seek relief they are in such a condition that recovery is impossible, however well they may thenceforth be fed.

three years, and which have also been smitten hard* by the plague, show a wonderfully small loss of population. In Poona, Ahmednagar, and Satara, the decrement is from 6 to 7 per cent. but in the other districts it is considerably less. If it be conceded that the mortality from plague is double that actually reported, this alone would account for nearly the whole of the falling off in Poona and Satara. The vital statistics indicate a rapid growth of population up to 1886, and in some cases even after that year, and this is perhaps the reason why the loss appears so small when comparison is made with the population as it stood in 1891.

115. In the Konkan, or coast districts, Bombay City and Thana alone show a decrease, which is more than accounted for by the reported mortality from plague; there has been a growth of 2 per cent. in Kolaba and Kánara and of 6 per cent. in Ratnagiri, which, next to Surat, is the most thickly populated district in the Presidency, and supplies Bombay City with more than a seventh of its total population.

116. In the Karnatak, Dharwar has a gain of 6 per cent., and Belgaum and Bijapur a loss of 2 and .8 per cent. respectively. The decrease in Belgaum is fully explained by the virulence of the plague epidemic, and in Bijapur it is probably due to losses on account of famine, especially in 1896-97, when the number of persons on the relief works* was greater than in any other district. The returns of the Sanitation Department do not indicate a mortality sufficiently high to account for such a marked diminution in the population, but there can be no doubt of the severity of the famine. There had been some distress in 1891 also, but the relief works which were then opened did not attract many persons and the reported death-rate was not specially high. The losses of cattle from failure of fodder were, however, very great, and this may have led to emigration. The population of this district has shown great fluctuations at successive enumerations.

117. The variations in the Native States show the same general direction as those in the British districts which they adjoin, but where famine conditions prevailed, the loss of population has usually been far more terrible. In Gujarát the two western States of Cutch and Káthiáwár have lost ground in about the same ratio as the British districts, but in the east, Rewakantha and Mahikantha have lost more than a third, and Palanpur more than a quarter, of the population recorded at the census of 1891. Further south, the States attached to the districts of Surat, Khandesh, Nasik, and Satára have suffered a far greater loss than the districts themselves, and in the Khándesh Agency two-fifths of the population recorded in 1891 has disappeared. On the other hand, the Khairpur State in Sind, after remaining stationary for twenty years, has added no less than 54 per cent. to its population in the course of the last decade, and Sávantvádi, south of Ratnagiri, has added 12 per cent., or more than any British district. Mr. Enthoven considers that the rapid growth of Khairpur is attributable largely "to the improvement in the administration of the State which the last ten years have witnessed."

118. **Burma.**—The figures in Table II, so far as they relate to Burma, are obscured by the great additions which have been made since 1872 to the population of that province and also, it would seem, by the inaccuracy of the enumeration of Lower Burma in 1872 and of part of Upper Burma in 1891. The rise of the recorded population from 2,747,118 in 1872 to 10,490,621 at the present census requires therefore to be analysed in some detail. The figures for 1872 and 1881, during which period the recorded increase amounted to 36 per cent., refer only to Lower Burma. The census of the former year was taken in August, when the temporary immigrants from other parts of India were very few in number, and it was also relatively inaccurate. The omissions were estimated at about 30,000 in the Census Report for 1881, but ten years later Mr. Fane concluded that, as there was no reason why the natural growth of the population should have been greater between 1872 and 1881 than it was in the next decade, they must have amounted to about ten times the above

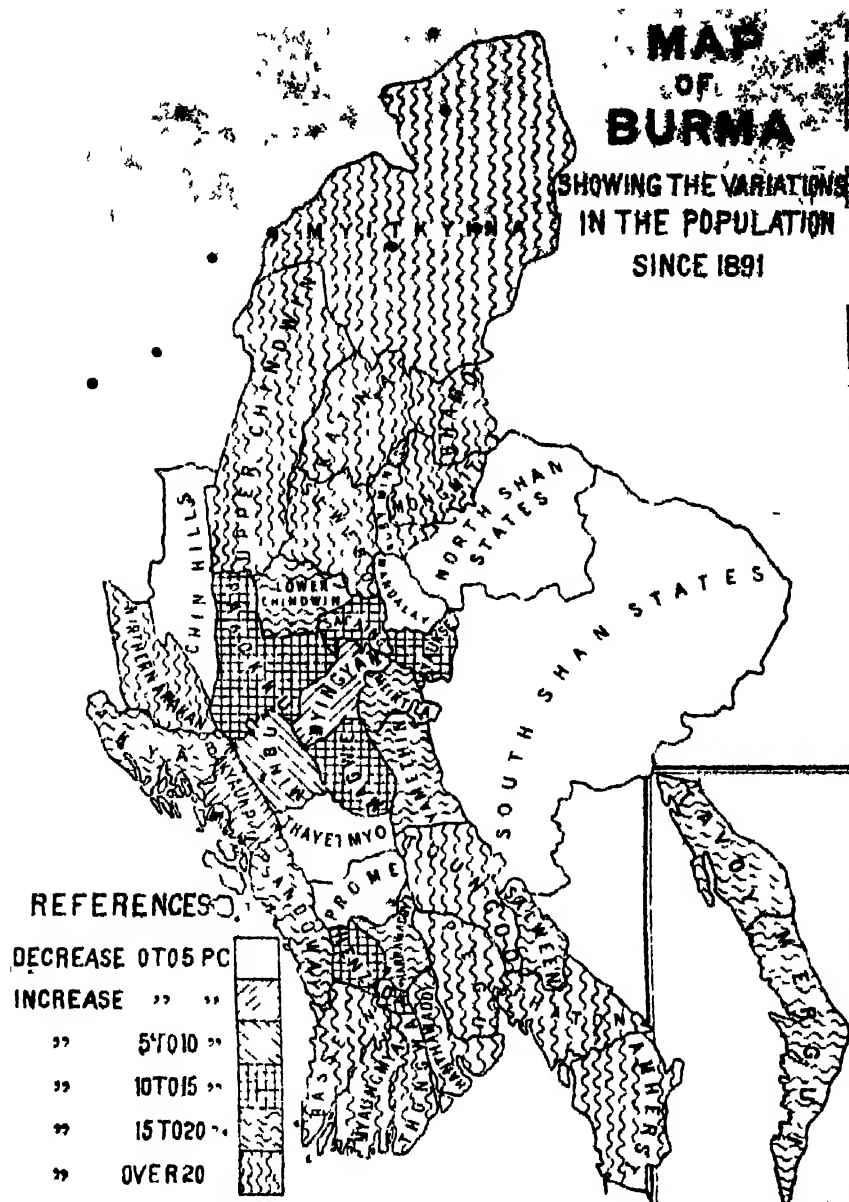
VARIATIONS IN POPULATION OF BIJAPUR	
Year of Census.	Variation
1881	—178,945
1891	+169,450
1901	— 60,904

Konkan

Karnatak

Movement
in Native
StatesSummary of
improvements
from 1872 to
1901

figure In the course of the decade ending in 1891 the population of Lower Burma rose to 4,658,627 or by 24½ per cent., of which about 2½ per cent was attributed to immigration and 22 per cent to natural growth. Upper Burma was annexed in 1886 and was enumerated for the first time in 1891, when its population was returned as 2,946,933. This brought the total up to 7,605,560 for the province as now constituted excluding the Shan States. The present population of the same area is 9,136,382, an increase of rather more than a million and a half, or 20 per cent.* The rate of growth is 21 per cent. in Lower, and 17·7 in Upper, Burma. The latter tract, however, includes five districts where the enumeration of 1891 was very incomplete, and if these be left out of account, the rate of increase there falls to 11·2 per cent.



Note.—The Chin Hills and the North and South Shan States were not enumerated in 1891.

Conditions affecting movement between 1891 and 1901

119. There is no province (except Assam) where migration exercises so great an influence on the population as in Burma, which draws largely on Madras and Bengal, not only for coolies, field labourers, and domestic servants, but also in some parts for its cultivators. Lower Burma has gained in this way 130,000 during the decade and Upper Burma 22,000, while the corresponding loss by emigration is trifling. There is also a considerable, though gradually diminishing, volume of migration from Upper to Lower Burma, the net result of the movements between the two tracts at the present census being a loss to Upper Burma of nearly a third of a million. Allowing for deaths amongst emigrants, it may be assumed roughly that while Lower Burma has gained by migration during the decade to the extent of a quarter of a million, Upper Burma has lost some 60,000.† If the effect of migration, as thus esti-

Province	NUMBER OF IMMIGRANTS FROM OTHER PROVINCES, ETC	
	1891	1901
Lower Burma	475,328	323,176
Upper Burma	398,726	268,772
	76,603	54,404

the net result of the movements between the two tracts at the present census being a loss to Upper Burma of nearly a third of a million. Allowing for deaths amongst emigrants, it may be assumed roughly that while Lower Burma has gained by migration during the decade to the extent of a quarter of a million, Upper Burma has lost some 60,000.† If the effect of migration, as thus esti-

* The figures showing the population of Burma as enumerated both in 1891 and 1901 differ from those given in the Provincial report owing to the inclusion in the latter of 118,493 persons in Upper Burma, whose enumeration schedules were destroyed in the disturbances which originated in the Shan State of Wundwin shortly after the census of 1891, and who were thus not dealt with in the final tables.

† It must, however, be remembered that a very large proportion of the immigration is purely temporary. Many of the immigrants come for the paddy harvest and the milling season and then return home. The number of these temporary immigrants is highest in the cold weather, i.e., at the time of year when the census is taken.

mated, be discounted, the gain comes to about 15·8 per cent. in Lower, and 19·7 per cent. in Upper, Burma. In the latter tract, however, as already noticed, allowance has also to be made for better enumeration. The progress which these figures show is remarkable, but it is not more than is to be expected in a country of great natural fertility with an easy revenue assessment and a scanty population. Except in the neighbourhood of Mandalay very few townships of Upper Burma have a density of more than 100 persons to the square mile, and even in the rich rice tracts of the Irrawaddy Delta, there is no district with 170 persons to the square mile, whereas the joint delta of the Ganges and the Brahmaputra supports from 600 to 850, that of the Mahanadi, 568, and that of the Godavari, 443. The country generally is healthy and there have been no specially destructive epidemics in recent years.

Communications have been greatly improved by the construction of roads and railways, and the total length of the latter is now about 1,200 miles of which more than a third has been added since 1891. The area under irrigated crops is nearly three-quarters of a million acres, which represents an increase of nearly 50 per cent. during the decade; the total cropped area is reported to be nearly half as great again as it was in 1891, but this is due in part to more accurate surveys. The amount of rice exported has risen from less than 1½ to nearly 2 million tons a year. The value of rubies extracted in 1900 was over 14 lakhs of rupees or nearly five times as great as in 1895. The Burmese, in towns at least, seldom work as coolies, and large crowds of Madrasis and other immigrants from India are attracted by the high wages offered, amounting to Rs 14 a month at the season when labour is in most demand, while harvesters can earn even more than this. The famine of 1896-97 made itself felt in a few districts of Upper Burma, but it did no permanent harm. The inhabitants of the affected tract had no difficulty in finding employment, either on the local relief works or in Lower Burma, where the usual demand for labour had not slackened, and whither they were given every encouragement to go. Lower Burma was, throughout the famine, one of the principal granaries of India and the high prices that prevailed were a source of additional prosperity to the cultivating classes. There has thus been nothing to check the growth of the population. Marriage is just as common as in India, but as girls do not marry before puberty and widows can easily find second husbands, the reproductive power of the Burmese is greater than that of most other Indian races, and the rate at which they are multiplying need therefore occasion no surprise, especially when we remember that in one of the districts of East Bengal, which in 1891 already contained 713 persons to the square mile, the population has increased during the decade by nearly 19 per cent.

120. The greatest progress in Lower Burma is found in three of the great rice-growing districts in the delta and in North Arakan. Each of these has grown by more than 40 per cent. in the course of the last ten years. The rapid development of the deltaic districts appears even more extraordinary when compared with the results of the first census in 1872. At that time Myaungmya had only 24 inhabitants to the square mile; it has now 102. Thongwa had only 43, but now has 139. In Pegu the population is three times, and in Hanthawaddy it is 2½ times, as great as it then was. This remarkable progress is of course due largely to immigration, mainly from other parts of Burma.

Movement
in different
localities

District.	NUMBER OF INHABITANTS PER MILE	
	Total	From Burma
Myaungmya	621	20
Thongwa	402	37
Pegu	326	62
Hanthawaddy	284	97

as it then was. This remarkable progress is of course due largely to immigration, mainly from other parts of Burma.

In Upper Burma, the greatest apparent growth is found in the 'Wet' districts, but Mr. Lewis is of opinion that a large part of the increase in this tract is attributable to omissions in 1891. Of the 'Dry' districts Shwebo with 24 per cent. shows the most rapid progress, while Mandalay which adjoins it has sustained a decline of 2 per cent., due probably to the disappearance of the centripetal influence exercised before the annexation by the Court of the Kings of Ava. With the exception of Myingyan, which is stationary, the famine districts in the dry zone of Upper Burma, which has been characterised as "one of the most precarious tracts in the Empire," show an increase varying from 13 to 18 per cent.

Earlier
enumerations

121 Central Provinces.—The first census of the Central Provinces was taken in 1866 and disclosed a population of 9,036,983. Three years later came the famine of 1869, which touched with severity only the northern and eastern borders and caused an excess mortality estimated at about 250,000. Notwithstanding this disaster, the census of 1872 showed a small increase of 186,551 persons, the population then recorded being 9,223,534. In their forecast of the liability of the Province to scarcity, the Famine Commission of 1880, while admitting that the harvests as a general rule depended on the natural rainfall, went on to say that in the greater part of the country the rainfall had never been known to fail "and no part of India is freer from any apprehension of the calamity of drought than are the Central Provinces and Berar." By 1881 the population had risen to 11,548,511, or by 25.2 per cent, a considerable proportion of which may be ascribed to improved enumeration, especially in the Native States, which showed an increase of 63 per cent. The census of 1891 enumerated 12,941,805 persons, being 12.1 per cent. more than in 1881. Here again some allowance must be made for more accurate methods in the Native States, where the increase was 26.1 per cent. as compared with the more probable figure of 9.6 in British districts.

Decrease in
the past
decade

122. The events of the ten years preceding the last census have signally falsified the optimistic views of the first Famine Commission. A succession of bad seasons culminated in the first great famine of 1896-97, which was followed, after a single year's respite, by the widespread calamity of 1899-1900. Epidemics of cholera prevailed in seven years out of the period and malarial fever was on several occasions unusually frequent and severe. These disasters, coming upon a weakened and impoverished people, reduced their number to 11,573,029 persons, a decline of 1,071,776 or 8.3 per cent.

Its probable
cause

1-3. We have no means of determining with any approach to precision to what extent this loss of population is due (1) to emigration exceeding immigration, (2) to a reduced birth-rate, (3) to an enhanced death-rate. All these causes have no doubt contributed in varying degrees to the result, but it is impossible to separate them with certainty and to state definitely what effect each has produced. Let us first consider emigration and immigration. The returns of birth-place show that 182,228 persons born in the Central Provinces were enumerated in other parts of India, and conversely, that 460,694 persons born elsewhere were enumerated in the Central Provinces. The former figure represents an increase of 1,663 and the latter a decrease of 71,672 on the corresponding statistics of 1891. But neither the one nor the other is a true measure of the real movement of the period. Each merely shows the net result of migration and reduction by death on the total number of emigrants and immigrants respectively. The number of people that actually migrated can only be estimated approximately. The method I adopt for this purpose has the sanction of the high authority of Mr. Noel Humphreys and has been used by my friend Dr. Longstaff* in estimating the movement of population within the United Kingdom. On this system it is assumed that the average number of Central Provinces people in other parts of India during the decade was the arithmetical mean between the number at its beginning and end, thus —

(1) Emigra-
tion

$$\frac{182,228 + 460,694}{2} = 481,396$$

A death-rate of 10 per 1,000, which is a fair ratio to take, would in ten years carry off two-fifths of the average population

$$\frac{481,396 \times 2}{5} = 192,558$$

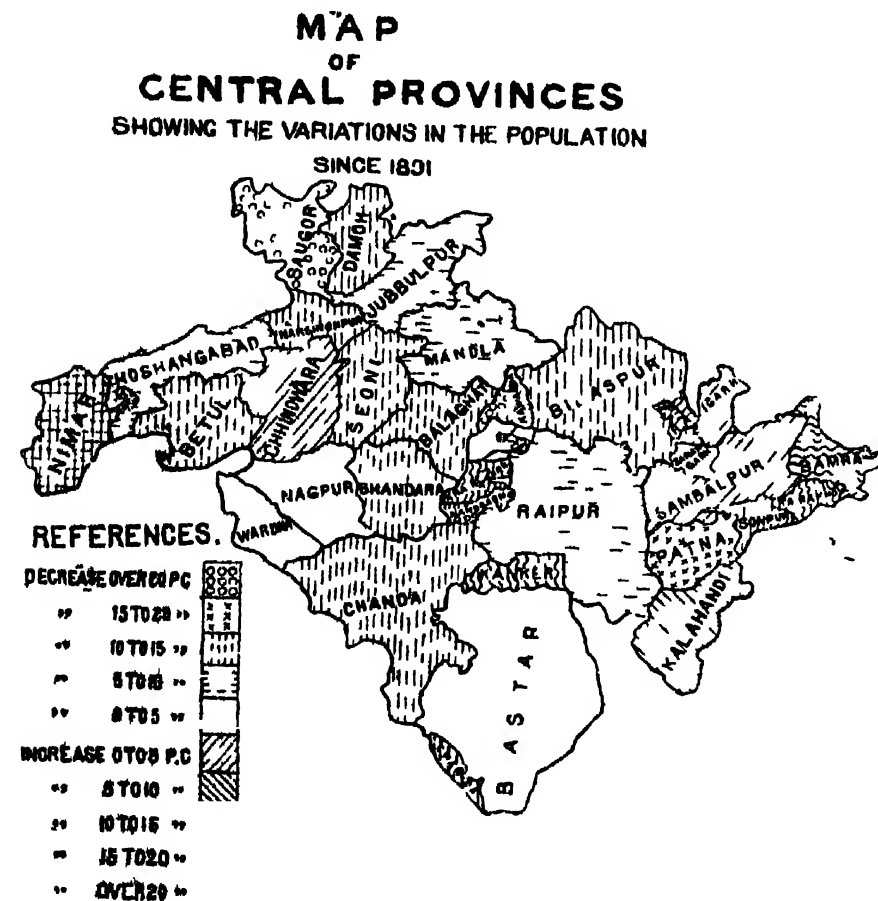
Adding to this the census increase of 1,663 we get 194,221, as the probable number of emigrants during the ten years. By the same process, only deducting the census decrease in immigrants of 71,672, the immigrant population is calculated at 126,916. The difference of 67,281 represents the extent to which the balance of emigration and immigration has contributed to the decline of population in the Central Provinces. So far as emigration is concerned, the figure assumed above does not differ very materially from Mr. Russell's estimate of between one and a-half and two lakhs. But he omits to take immigration into

* Longstaff, *Studies in Statistics*, page 40

account and assumes that the whole number of emigrants can be deducted from the decline in population brought out by the census. This of course is not the case. I think it possible, however, that the number of emigrants to Assam may have been understated owing to many of the tea coolies recruited in the Central Provinces being collected at Purulia and returned as natives of Bengal. People of the coolie class do not distinguish very clearly between Chota Nagpur and the Central Provinces and are apt to speak of both indifferently as 'Nagpur'. On the whole then the net loss to the Province by migration during the ten years may be estimated at 70,000.

124. The general conclusion is that emigration accounts for only an insignificant proportion of the census decrease of population. This is in the main what the circumstances lead us to expect. That there should have been a large increase in the number of persons who were conveyed to Assam under the Labour Act is natural enough; a famine is the recruiter's opportunity, and assisted emigration is a most effective form of relief. It takes the ruined cultivator or landless labourer to a new country where his labour is wanted, and in a large number of cases he and his family settle down and prosper in Assam. But while assisted emigration increased, ordinary or spontaneous emigration to neighbouring provinces declined, doubtless for the sufficient reason that people had nothing to gain by wandering into adjacent tracts where the famine was as severe as in the Central Provinces, and the relief arrangements, at any rate in the second famine, less complete and liberal.

125. For the first four years of the decade the birth-rate was not very markedly below the average rate (40·8) of the decennial period 1881-91. In 1895 it dropped suddenly from 39 per thousand to 33; in the next year there was a fall to 32 and in 1897 it fell to 27. In 1898 the rate rose to 30 and in 1899 it reached the very high figure of 17 per thousand, declining again to 32 in the following year. It is not contended that these statistics are absolutely accurate, still less that they can be made the basis of any precise calculation. Their fluctuations, however, show a close correspondence with the comparative severity of distress in different districts and we may credit them with a fair degree of relative accuracy.



parative severity of distress in different districts and we may credit them with a fair degree of relative accuracy. In 1895, for example, the drop in the birth-rate was peculiarly conspicuous in the districts of Saugor, Damoh and Jabulpore regarding which the Famine Commission of 1898 observed that the whole machinery of famine relief ought to have been brought into play at the beginning of 1896. At this critical time, indeed, the birth-rate appears to have given a clearer note of warning than the death-rate. The former declined in Saugor by 30 per cent., in Damoh by 39 per cent and in Jabulpore by 31 per cent. While the rise in the death-rate was only 18 per cent. in Saugor, 11 per cent. in Damoh and 8 per cent. in Jabulpore. The point seems to deserve some attention. The relation between the rise and fall of

prices and the fluctuations of the birth-rate is known to be very regular and intimate, and there are physiological reasons for believing that the reproductive functions are the first to be affected by any marked reduction or deterioration of diet. It follows that in a country where scarcity and famine recur at uncertain intervals special attention should be paid to the registration of births and their variations should be recognized as giving a definite indication of any continued decline in the material condition of the people. They are of course nine or ten months in arrear of the causes which give rise to them, but where these causes themselves have been overlooked or misinterpreted the fall in the birth-rate tells a decisive tale. Our sources of information as to the prosperity of the masses are not so infallible that we can afford to neglect even a tardy warning.

(iii)
Enhanced
death rate.

126. Turning now to the death-rate we find that in six years out of ten it was substantially in excess of the average ratio (32·4) for the period 1881-1891, that in 1896 it rose to 49 per thousand and in 1897 to 69, the rate for 1900, the year of the second famine, being 56·7. For the first famine the returns of deaths are probably a good deal below the mark. In many districts the reporting officers, mostly illiterate village watchmen of the lowest castes, were greatly overworked, rural society was disorganized by famine and cholera, and large numbers of people, especially members of the wilder tribes, had left their homes and wandered away into the jungles in search of food. Accurate registration is difficult enough to attain in ordinary years: when panic has set in on a large scale it becomes impossible. In 1900 the elaborate organization of famine kitchens kept the natives of the province in their villages, special work of a congenial nature was provided for the jungle tribes, and aimless roaming about the country seems to have been reduced to a minimum. It may therefore be assumed that the mortality statistics of 1900 are approximately correct. For the purpose of estimating the deaths directly and indirectly traceable to the second famine, the Famine Commission of 1901 take the decennial average of recorded deaths at 351,548 and deduct this from 539,234, the number of deaths registered in 1900. They thus arrive at 187,686 as the excess mortality of that year in British districts. If we follow their method and deduct the same decennial average from the number of deaths registered in 1896 and 1897 we get 424,195 as the excess mortality of the first famine, and 611,681 as the excess mortality of both famines in British districts alone. Adding 123,680 for Native States the abnormal mortality of the Province may be stated in round numbers at 735,000.

It does not follow, however, that the whole of this mortality can be set off against the census decrease of population. On the one hand it includes the numerous deaths which occurred among the poverty-stricken wanderers from the adjacent Native States, who suffered acutely both from privation and disease. On the other hand the actual loss must have exceeded the diminution shown by the census, which compares the population of 1901 with the population of 1891, and takes no account of the natural increase which occurred during the first four years of the decade when the birth-rate was only slightly below its normal standard. If during this period the population had increased at the rate of 6 per thousand, or 2 per thousand less than the mean rate of increase of the preceding ten years, the number of people actually living at the end of 1894 would have been 13,258,287, and the decrease of population within the decade would have amounted to 1,385,258 or half as much again as the diminution disclosed by the census.

Deaths from
starvation
etc.

127. It need hardly be explained that the phrase famine mortality does not imply death by starvation. A certain number of such deaths must of course occur in every great famine especially in one which, as was the case in 1896-97, finds the administration comparatively unprepared for the emergency which has to be met. But in practice it is found impossible to distinguish between deaths caused by actual want of food and deaths due to disease accelerated by insufficient or unsuitable food. No record therefore is available of deaths from starvation properly so called. Nor is it possible, with any approach to accuracy, to distribute the recorded mortality among the various forms of disease. As the Famine Commission of 1901 point out, "the data for such an erratic diagnosis of the village watchman, who is in the habit of attributing to fever all deaths as to the cause of which he is in doubt." All that can be said is

that scanty and unwholesome food and a short and polluted water-supply more than trebled the mortality from cholera and bowel complaints, and that in the autumn months of both famine periods virulent epidemics of malaria affected all classes of the people.

The weakest of the people suffered most acutely and both famines were marked by very high infant mortality and a disproportionate increase of deaths among people of advanced age. The following statistics of deaths by certain age periods in the two famines illustrate these remarks:—

	DEATHS				
	Under 5 years	5—15.	15—40.	50—60.	60 and over.
1896 and 1897	350,013	130,999	274,227	215,930	147,145
1899 and 1900	355,696	79,963	153,522	117,208	99,770
Difference per cent. in latter period	+1.6	—38.9	—44.0	—15.7	—32.2

The figures bear striking testimony to the great advance in the organization of relief and the higher degree of success in saving life which distinguish the famine of 1899-1900 from that of 1896-97. In the second famine indeed the infant mortality was conspicuously high, but if allowance is made for defective reporting in the first famine there is little to choose between the two. It must further be remembered that in 1899 the birth-rate rose by nearly 60 per cent. and that half of the births took place in the last six months of the year, so that when famine conditions set in an abnormally large number of children were exposed to exceptional risks. The precise causes of the enormous mortality that occurred seem to be rather obscure. It is not alleged that the parents were specially reduced. Gratuitous relief was liberally given to nursing mothers and to women advanced in pregnancy, but most of them preferred to follow their husbands to the relief works and "it was a common sight to see a healthy strong woman, with a miserable pining infant wasted to a skeleton, unable apparently to nourish it." One is tempted to conjecture that some congenital influence must have been at work. It is conceivable that the outburst of fecundity which follows upon a period of scarcity may contain within itself the elements of imperfect vitality and that a crop which has sprung up so quickly may be fore-doomed to perish prematurely. However this may be, the figures for all the later age periods bring out a remarkable contrast between the first famine and the second. Putting aside the financial aspects of the problem, and the rather over-rated danger of demoralizing the people by indiscreet liberality, there can be no question that in 1899-1900 the administration of the Central Provinces was signally successful in keeping alive the large section of the population whose only want was a sufficiency of ordinary food. Children at the breast alone could not be saved; their needs were, and always will be, of too special and delicate a character to be met by the rough machinery of famine relief.

128. To complete the picture of the trials through which the Province has passed two other sets of facts must be referred to. The first is the age table, the second is the variation in castes. If we compare for British districts the age distribution of 1891 and 1901, we find that among ten thousand of the population there were living on each of these occasions:—

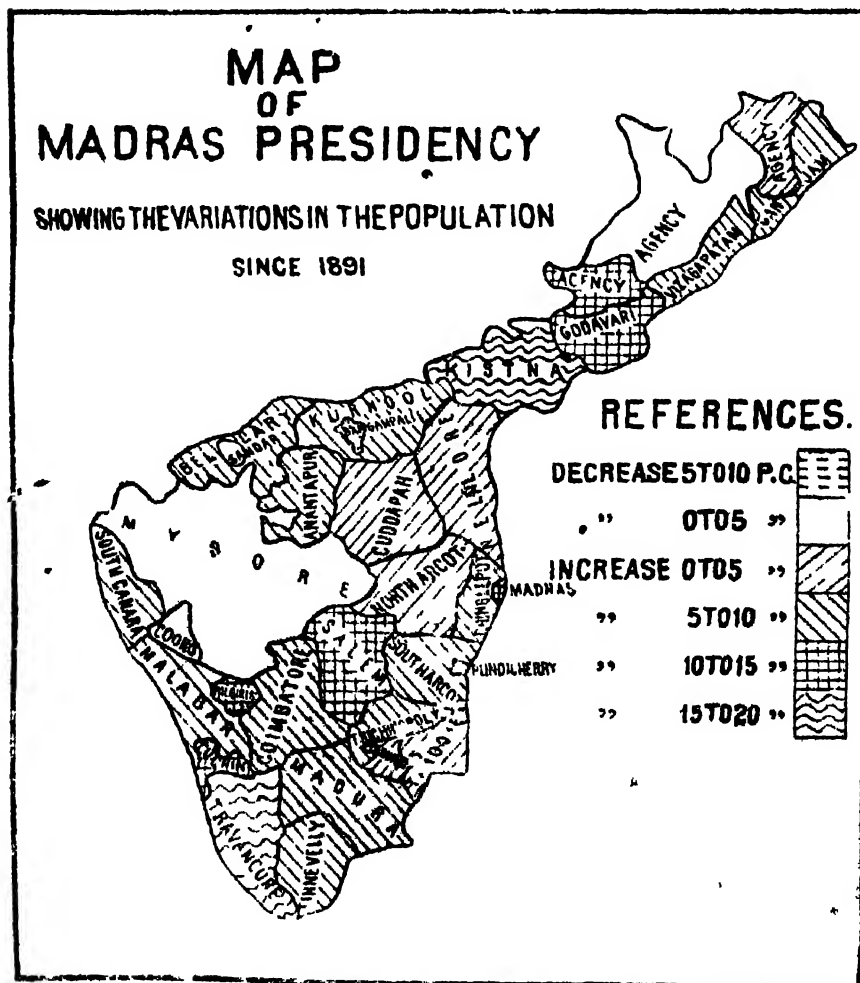
	1901	1891.	Variation.
Persons under 10	2,632	3,068	—436
10 to 15	1,225	1,102	+123
15 to 40	4,102	3,745	+357
40 to 60	1,612	1,525	+87
60 and over	420	560	—131

The decline in the number of children and old people reflects the characteristic inroads of disease and scarcity upon the weakest members of the community. The increase in the proportion of persons between the ages of ten and sixty is mainly a consequence of the great diminution which has taken place at the two ends of the series. It does not follow, for example, that because the proportion of persons in the reproductive period from fifteen to forty is greater by $4\frac{1}{2}$ per cent. than in 1891, there is a similar preponderance in the actual number of people capable of bearing or begetting children. And recovery of the population from the wastage caused by famine is clearly dependent upon the absolute number of possible parents and not merely on their relative strength as compared with the proportion in the earlier and later age periods.

129 The variations in the number of different castes set out in subsidiary table V of the Provincial Report are in one respect curiously parallel to the variations in the age periods. Here also the weakest have suffered most. The Dravidian tribes, resourceless, suspicious, living a hand-to-mouth life in the jungle and unwilling to change their ways, have lost 384,000 or nearly 12 per cent. of their number. Of the larger tribes the Kols have been reduced by 15 per cent., the Kandhs by 14, the Gonds by 13, the Halbas by 11 and the Sawaras by 8. The low castes, mostly of Dravidian descent, who live by field labour and weaving and whose touch conveys ceremonial pollution show an aggregate decline of 298,000 or 11 per cent., the Chamars losing 17 per cent.; the Panka and Ganda, both weavers, 15 and 13 respectively; and the Katia and Kori over 20 per cent. As we ascend the social scale the proportionate decrease steadily diminishes. The lower artisans show a falling off of 6 per cent., the higher cultivators of 5, the higher artisans and traders of 4, while in the highest group of all including Bráhmans, Rájputs, Káyasths and Banias the decrease is only 159 or '01 per cent. The diminution in the lower groups is doubtless due to the excessive mortality of 1897 when the administration had to face, and admittedly failed to solve, the difficult problem of forcing relief upon people who were reluctant to accept it until they had been reduced to a state of debility which could only end in death.

180 Coorg.—The little Province of Coorg, the smallest in India, is a mountainous tract lying on the top of the Western Ghats with a heavy rainfall and a temperate climate. The indigenous cultivation is confined to the narrow valleys, but coffee and cardamoms are grown on the uplands. Its present population is 180,607 or about that of an average taluk in the Madras Presidency. It has gained 1·4 per cent since 1891 and 7·3 per cent. since 1871 when the first census was taken. The progress since 1891 would have been greater but for the adverse times which have befallen the coffee planters during the last few years, *i.e.* the recent heavy fall in prices which has led during the latter half of the decade to a decrease of more than a quarter in the area under cultivation. The province was practically untouched by the famine.

131 Madras.—Inclusive of 4,188,086 persons in its Native States, the



population of the Madras Presidency is 42,397,522, an increase of 7·8 since 1891, compared with a gain of 15·1 per cent. in the previous, and a loss of 0·9 per cent in the penultimate, decade. The net gain since 1871 is 22·8 per cent., and to this the Native States and British territory have contributed in almost equal proportions. Prior to 1871 frequent estimates of the population had been made through the agency of the subordinate staff of the Revenue Department. The first of these was framed as far back as 1821-22, and for twenty years previous to 1871

quinquennial returns of population were compiled. "All of them, however," says Mr Francis, "were rough estimates rather than actual computations, and the figures in them are worthless."

The decline of population between 1871 and 1881 was due to the calamitous famine of 1876-78, and was far greater than would appear from a comparison of the census figures, which are estimated to have been deficient in 1871 to the extent of nearly 850,000. The growth of 15·1 per cent. during the next decade was the usual accompaniment of a period of good seasons and recovery from famine losses. In his report on the Madras Census of 1891, Mr. Stuart gives an interesting table showing that in the nine districts which had suffered most from the famine of 1877-78, a loss of 12·9 per cent between 1871 and 1881 was followed in the next decade by an increase of 20·1 per cent, while in the rest of the province, where famine had not seriously affected the population, there was a growth of only 12·8 per cent. At the same time it is probable that in 1881-91, as in the previous decade, the recorded rate of increase was inflated, to some extent, by the relative incompleteness of the earlier of the two enumerations *

132. Since 1891 the conditions in Madras have not been favourable to a rapid increase of the population. According to Mr Francis, "Plague checked trade and enterprise, and there were three scarcities—in 1891-1892, in 1897, and in 1900. The first of these was most severely felt in the Deccan districts, especially in the Cumbum and Markapur taluks of Kurnool, and in the adjoining western taluks of Nellore. The second affected the Deccan Division again, and the Ganjam, Vizagapatam and Godavari districts of the East Coast Division. The third was again worst in the Deccan (especially in Cuddapah) and the western part of Nellore, and also attacked the west part of Kistna adjoining." What the precise effect of each of these visitations was it is not easy to say. The Sanitary Commissioner concluded from the vital statistics that though no actual deaths from starvation were reported during the scarcity of 1897, the total diminution of population due to the famine conditions which then prevailed, such as a reduced birth-rate, increased susceptibility to ordinary disease among ill-nourished persons, and so on, was over 20,000 persons. Most of this loss was estimated to have occurred in the Deccan districts." It may be added that the above famines were less severe in Madras than in many other parts of India. The worst was that of 1896-97, but thanks to the prompt measures of relief undertaken by the Madras Government and, in the case of the East Coast districts, to the fact that the previous four years had been years of plenty, the sufferings of the people were far less than they would otherwise have been.

Conditions affecting movement between 1891 and 1901

The volume of emigration has grown remarkably since 1891, especially to Ceylon and Burma. In Ceylon there are now at least 403,000 natives of Madras compared with 235,000, and in Burma 189,810 compared with 129,345; in the Straits Settlements the present number is 51,800 against 48,064 in 1891. There is also an adverse balance of migration in the case of movements between Madras and other parts of India, excluding Burma, aggregating 214,000, as against some 138,000 in 1891†. So far as the information available goes, it may be concluded that the net loss on account of migration has risen from 550,000 in 1891 to 858,000. There are moreover many emigrants from Madras in Natal, Mauritius and other colonies, but exact figures are not forthcoming.

On the other hand the productiveness of the land has been increased during the decade by the Rushikulya and Periyar irrigation schemes in Ganjam and Madura respectively, and by greater attention to irrigation from tanks and wells. Communications have been greatly improved, and there are now more than 3,000 miles of railway compared with about 2,000 in 1891. There has also been a considerable development of industrial enterprise, especially in respect of cotton mills which in 1901 employed an average of 16,000 persons daily compared with 6,000 in 1891. At the same time a rate of progress equal to that which obtained during the ten years preceding the census of 1891 was clearly not to be

* It is not stated in the local report that the census of 1881 was generally less accurate than the one taken ten years later, but this was the case in other provinces and it may be assumed to have been so in Madras also. In the case of the Ganjam district it was admitted that the population had been "much understated in 1881" and it is probable that in other districts also the standard of accuracy was less high than that attained, with the aid of growing experience, at the census of 1891.

† It is impossible to ascertain the exact figure now.

expected in the decade under review, and the fact that the population has increased by as much as 7·8 per cent. affords unmistakeable evidence of the general well-being of the people and of their growing capacity to resist the evil effects of crop failure.

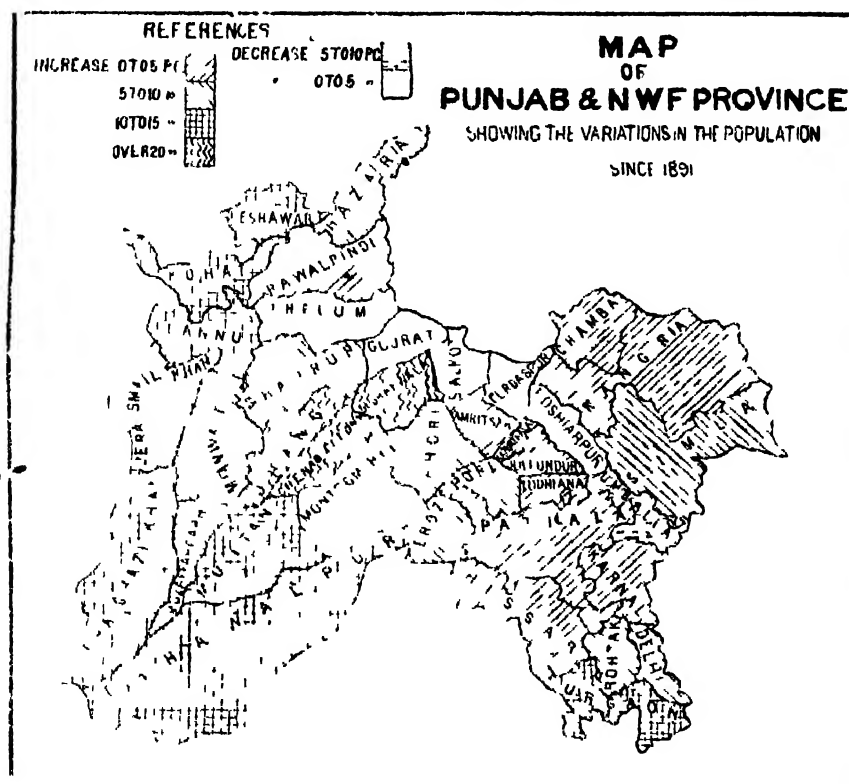
Movement in
different
localities

133. The rate of increase is smallest in the Agency tracts which adjoin a decadent area in the Central Provinces. Two of the three tracts included in this division have given a satisfactory increase, but the third, the Vizagapatam Agency, shows a small loss of population. The causes of the decline are hard to trace, but it is probably due mainly to migration to Assam and to the unhealthiness of the climate; the tract is, moreover, very inaccessible, and supervision of the enumeration is difficult, so that the same confidence cannot be reposed in the results of a single census as in more settled tracts.

The East Coast districts, in spite of the famine, have grown at a slightly more rapid rate than the Presidency as a whole. This tract contains the most progressive district in the whole Presidency, *viz.*, Kistna, which has grown by 16 per cent. owing to the development of the system of irrigation from the river of the same name and the consequent extension of cultivation in its delta. The smallest advance is shown by Nellore, which has sent out numerous emigrants to the Kistna district from the western taluks, where there has been a succession of bad harvests. The southern districts taken together show much the same rate of increase as the general mean, and the only noticeable variations are furnished, on the one hand by Madras and Salem, which have added more than 12 per cent. to their population, and on the other by Tanjore and Pudukkottai, where the growth is very slight. In the case of Tanjore which, with 605 inhabitants to the square mile, is the most densely-peopled district in the Presidency, the result is due to extensive emigration to the Straits, Ceylon and Burma. The West Coast districts, though they enjoy a heavy rainfall and a fertile soil which sometimes yields three crops a year, have added only 6 per cent. to their population. The sparsely inhabited Nilgiris have an increase of 11·7 per cent., but Malabar shows only 5·6 per cent. The latter district has a density of 481 persons to the square mile, but it is in its more sparsely populated taluks that the want of progress is most marked.

Summary of
movements
from 1855 to
1901

134. **Punjab.**—A few months after the census the Punjab was shorn of a



considerable tract of country, lying chiefly west of the Indus, which has been formed into a separate administration known as the North-West Frontier Province. It will be convenient, however, in the present discussion to treat the whole as a single entity and to review the progress of the Province as it was constituted on the 1st March 1901. The first census, taken at the beginning of 1855, disclosed a population, on the area as it then stood (British territory

only), of 15,161,321 persons. On the 10th January 1868, when the second enumeration was effected, it had risen to 17,609,518. The corresponding population in 1881 was 18,850,437 and in 1891, 20,866,847. These figures represent a growth of 16·1 per cent. between 1855 and 1868, of 7·1 per cent. between 1868 and 1881 and of 10·7 per cent. between 1881 and 1891; the

annual rate of growth in the three periods was respectively 11, 5, and 10, per mille. The Native States attached to the Punjab were enumerated for the first time in 1881 and during the next ten years their population, which, in 1891, was 1,263,280, grew at the same rate as that of British territory. During the last decade the population of the Punjab, including the North-West Frontier Province and the Native States, has risen to 26,880,217* or by 7 per cent, the corresponding increase per annum is about $6\frac{1}{2}$ per mille. The North-West Frontier

Total Punjab	26,880,217
Punjab proper (British Territory)	20,330,339
North-West Frontier Province	2,125,480
Native States	4,424,398

Province has added 14.4 per cent to its population, the Punjab proper (British territory) 6.9 and the Native States, 3.8 per cent. The varying rates of growth at

different periods are partly genuine and partly due to the circumstance, more than once alluded to, that, up to the year 1891 (and even up to 1901 in the case of the Native States) each fresh census was more complete than the one which had gone before. There is no means now of gauging the extent to which omissions were responsible for swelling the increases obtained at the earlier enumerations. In Bengal half the increase between 1872 and 1881 and a tenth of that between 1881 and 1891 has been held to be accounted for in this way. In the Punjab, however, with its stronger revenue establishments and fewer remote areas where enumeration is unusually difficult, the margin of error must have been much smaller, especially in the case of the first census, and the gain on this account at each succeeding enumeration up to 1891 was probably fairly constant. If so, some other cause must be sought for the variations in the rate of increase, and this is to be found, as shown by Sir Denzil Ibbetson in 1881, in the relations which the different enumerations bear to the dates of the recurring famines with which the province has been visited. There was a famine three years before the census of 1855, and another eight years before that of 1868, the census of 1881 was taken twelve years after one famine and three years after another, but between 1881 and 1891 there was no such visitation. The rapid growth of population after a famine is well known, and it is thus easy to understand why the rate of progress disclosed at the censuses of 1868 and 1891, which followed periods of recovery from famine, should have been more rapid than in the thirteen years preceding 1881 when famine twice ravaged the country.

135 The conditions during the last decade are comparable to those of the interval between 1868 and 1881, there were two famines in both periods but those of the last decade followed each other with greater rapidity and there was thus less time for recuperation. The area affected by the failure of the monsoon of 1896 was very extensive, but the situation was improved by opportune rain in December, which facilitated the cold weather sowings, and there was severe famine only in a few districts in the south-east, *viz.*, in Hissar, where it was most acute, and in those portions of the districts to the east of it, *i.e.*, the districts round Delhi, which were not protected by the irrigation system of the Western Jumna Canal.† The relief afforded was ample and, except in Hissar, the death-rate in the affected tracts was little, if at all, above the average of the previous five years. There was a sudden rise in the mortality in Hissar and several other tracts at the close of the monsoon of 1897 but the Famine Commissioners of 1898 held that it was due mainly to fever "of the ordinary malarial type . . . which always occurs when a year of heavy monsoon rainfall succeeds a year of drought." The number of deaths, however, "was increased by the enfeeblement of health which a prolonged period of privation had produced." There was also a very heavy mortality among cattle owing to the drying up of fodder supplies.

Conditions affecting movement between 1891 and 1901

The area which was affected by the weak monsoon of 1899 was much the same as in the previous famine, and Hissar again suffered most. The death-rate of 1900 in all the famine districts was high, being more than double the decennial average, and in Hissar it rose to 96 per mille compared with an average of only 28 in the previous nine years. Cholera, dysentery and diarrhoea, the characteristic diseases of famine years, were not specially prevalent and the great bulk of the deaths were attributed to fever. The Famine Commissioners

* Includes about 75,000 persons in areas enumerated for the first time in the North-West Frontier Province. If these be excluded the increase comes to 6.6 per cent in the two provinces combined, and to 10.5 per cent in the North-West Frontier Province.

† The districts between the Jumna and the Sutlej have always suffered more from famine than other parts of the Punjab.

of 1901 found that "much of the mortality was due to an unusually unhealthy autumn acting upon a population predisposed to disease by privation." The general death-rate in this year was 47·7 per 1,000 which was higher than in any other year of the decade except 1892 when it was 49·5.

136. But if famine has exercised a prejudicial effect on the growth of the population, another factor has operated in the opposite direction. The decade has witnessed a very great development of State irrigation by means of canals, and the area so irrigated rose from about $2\frac{1}{2}$ million acres in 1890 to $4\frac{1}{2}$ million in 1900. There was a slight decline in the amount of irrigation from tanks, wells and private canals, but the total area receiving an artificial supply of water (about $9\frac{1}{2}$ million acres) was greater by 25 per cent than it was ten years previously. The most remarkable feature of the decade was the completion in 1892 of the Khanki Weir which, with the concomitant development of the Chenab canal system, has transformed an area of more than 3,000 square miles from a barren waste into one of the most fertile wheat-producing tracts of Northern India. Settlers are pouring in from the adjacent country, especially from Sialkot, Amritsar, Jullundur, Gurdaspur and Hoshiarpur, and "a scanty aggregation of pastoral nomads has been replaced by a population exceeding three quarters of a million".* There has also been a considerable extension of the Jumna canal system in the south-eastern districts which suffered most from the famine, and much has been done to rectify the defects in the alignment of some of the earlier canals which had blocked up many of the natural drainage channels and not only caused severe outbreaks of malarial fever but also led to the occurrence of the saline efflorescence, known as *reh*, which renders the land where it appears unfit for cultivation. The great utility of the Punjab canals is clearly shown by their financial results. In 1901-02 they gave a return of 11 per cent, on the $6\frac{1}{2}$ millions invested in them, the Chenab canal, which cost £1,770,361, gave a return of 19 per cent, and enabled crops to be grown on $1\frac{1}{4}$ million acres of land, the estimated value of which in a single year is nearly double the total cost of the canal.

Another feature of the decade is the rapid growth of mill industries, which has been assisted by the cheaper fuel now obtainable from the Bengal coal mines. During the ten years following the census of 1891 the number of steam mills for ginning and pressing cotton rose from 12 to 93, and the total number of factories using steam power from 34 to 134.

The immigrants to the Punjab from other parts of India and elsewhere now number 795,267 as against 740,750 in 1891. The corresponding figures for emigrants to other parts of India are respectively 435,351 and 425,257. There is no means of gauging the volume of emigration from the Punjab to places outside India, but it is known to be very considerable, and it has grown immensely during the last decade. Uganda, Hongkong, the Straits, Borneo, etc., all attract large numbers of Punjabis for military and other service, and Mr. Rose mentions, as an indication of the large scale on which emigration to such places takes place, that on the night of the census there were in one serai of Lahore no less than 1,000 labourers collected for railway work in Uganda.† If all these are taken into account the apparent gain from migration will be largely reduced.

Movement
in different
localities

137. The main factors which have affected the growth of the population are, therefore, the famine on the one hand and irrigation on the other. The latter has been more potent than the former, and wherever the system of canals has been extended, there the population has grown, even in spite of famine. This is the case in the tract described by Mr. Rose as the "Indo-Gangetic Plain, West," which lies in the south-east of the Province and includes all the districts where famine was acute in 1897 and 1900. The gain is here 5·8 per cent, which, though considerably less than the 9·9 per cent. of the previous decade, is not so very much below the rate of progress shown on the present occasion by the Province at large. The improvement in Hissar, where the famine was

* This tract, which was formerly divided between Gujranwala, Montgomery and Jhang has now been formed into a separate district called the Chenab Colony. A graphic account of its colonization will be found in the Punjab General Administration Report, for 1901-02. The scheme originated with a suggestion made by the Famine Commission of 1880. A similar colony is in process of formation on land irrigated from the Jhelum, and a third scheme for irrigating two million acres of land in the Sind-Sagar Doab, now lying barren, is contemplated.

† About 20,000 natives of the Punjab are believed to have been resident in Uganda at the time of the census.

exceptionally severe, is nominal, and it is only $2\frac{1}{2}$ per cent in Karnal, but in Rohtak, Delhi and Gurgaon it ranges from nearly 7 to $11\frac{1}{2}$ per cent. The only tracts in this area which are decadent are two small Native States.

The Himalayan area, which includes Simla, Kangra and a few Native States, has grown by 3·2 per cent. This tract is mountainous and infertile, and it seems probable that there is very little room for the extension of cultivation, which is possible only in the narrow valleys and on terraces laboriously constructed in the dips between the hills.

138. The results in the sub-Himalayan area are at first sight very discouraging. Rawalpindi and Hazara alone show an increase, and in the tract as a whole, a loss of 0·7 per cent. takes the places of the gain of 10·4 per cent. recorded at the previous census. The decade ending in 1891 was, however, specially prosperous and the growth was unusual, being more than twice as great as in the preceding thirteen years. Since 1891 there has been extensive emigration to the Chenáb Colony, and but for this, there would have been a gain of about 2·5 per cent. instead of the slight loss which has actually occurred; this would have given an annual rate of increase very similar to that which took place between 1868 and 1881. If there had been no emigration, Sialkot would have shown a gain of 6, instead of a loss of 3, per cent and the only districts in the natural division which would have lost population are Ambala and Jhelum, which have long been very unhealthy. The general slow progress in this tract, even if emigration be allowed for, is due to its position at the foot of the Himalayas. With very few exceptions, the climate of the whole of the sub-Himalayan country from the Punjab to Assam has for many years past been highly insalubrious and, in the greater part of it, the population is decadent.

The figures for the "North-West Dry Area", which includes the North-West Frontier Province and the south-west of the Punjab, afford a pleasing contrast to those just discussed, and the net result of the present census is a gain of 19·7 per cent., against 13·9 per cent. in 1891. East of the Indus, the rapid increase is due mainly to the development of the Chenáb Canal system which has led to extensive immigration from other parts of the Province. West of that river, part of the apparent growth is accounted for by the addition of an area containing 75,000 persons which was not enumerated in 1891. The rest is the natural result of growing material prosperity and the gradual extension of law and order, which has led to the settlement of tribesmen from across the frontier.* With the exception of Peshawar, where there has been a considerable extension of the irrigated area, the trans-Indus districts are very sparsely inhabited and a rapid growth of population may be expected for many years to come.

139. **United Provinces of Agra and Oudh.**—The earliest attempt to ascertain the population of the Province of Agra as then constituted, excluding the ceded districts on the Nerbudda and in Berar, was made in 1826 on the basis of a complete enumeration of the villages and a partial count of the houses. The total number of inhabitants was placed at 32 millions. Fresh computations were made in 1848, 1853 and 1865, but it is unnecessary to dwell at length on the results then obtained. It will suffice to say that the enumeration of 1853, which was based on a return, prepared for each village and hamlet, showing the number of persons, male and female, in each house, and is believed to have been the most accurate of these earlier efforts, showed a population less than that of 1891 by only 12 per cent., and led the Superintendent of Census in the latter year to the conclusion that "in the Western and Allahabad districts there has been only a trifling increase since the mutiny, and that the general increase is almost entirely due to the steady growth of the sub-Himalayan districts."

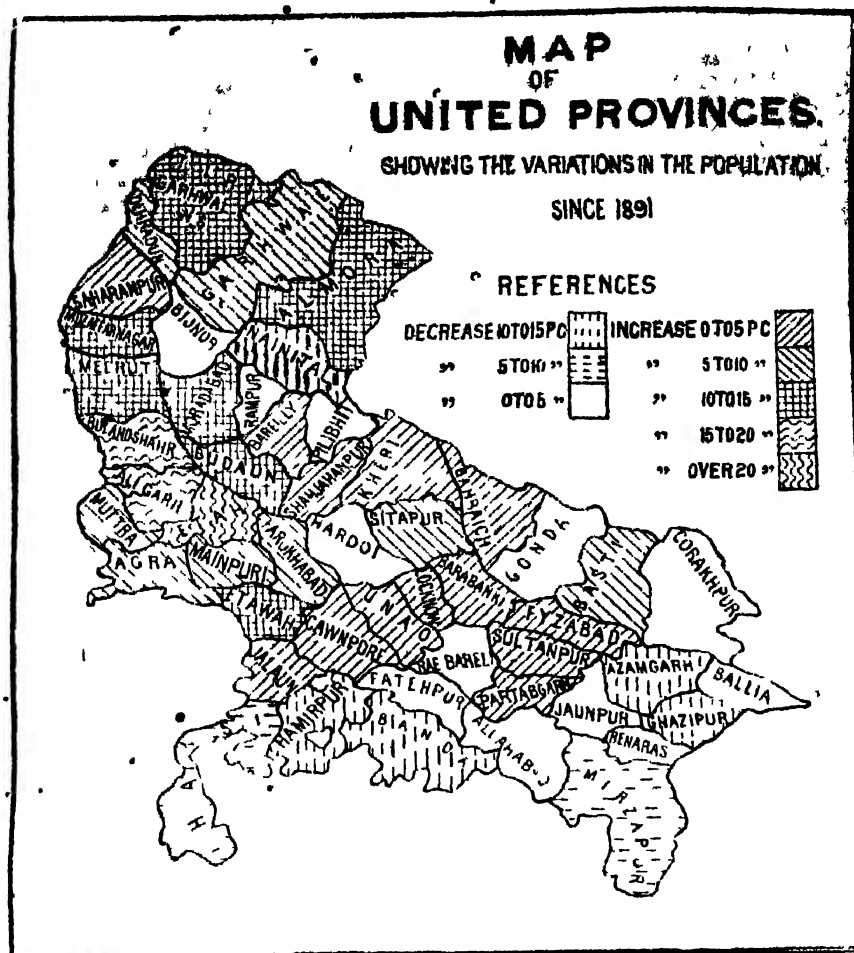
140. Oudh was annexed in 1856 and a census was taken there in 1869. The first census of the Province of Agra, based on a detailed enumeration of the people, was effected in 1872, and the result combined with that

Early estimates of the population

Summary of movements from 1872 to 1901

* The number of these immigrants is less than in 1891, but this is due to the fact that the earlier settlers are gradually dying and are being succeeded by their children born in British territory, rather than to their return to their original homes. The decrease in question merely shows that the stream of immigration is gradually getting weaker, and not that it has ceased to flow.

of the Oudh census just referred to was to show a population of 42,641,180



which has now risen to 48,493,879, being an increase of 14 per cent. This includes the population of the Native States attached to the United Provinces which now amounts to 802,097 as compared with 638,720 in 1872. Between 1872 and 1881 the registered growth of population was 5·3 per cent. During the next decade it was 6·2 per cent and in the course of the ten years ending in March 1901 it was 1·7 per cent. The true increase in the two earlier decades was, as elsewhere, obscured by the circumstance that each fresh count was more accurate than its predecessor. The

famine of 1877-79 intervened between the census of 1872 and that of 1881; the mortality from it and its attendant diseases, and from fever, was very high, and the Superintendent of Census Operations in 1881 demonstrated conclusively that the apparent growth of population then recorded was purely fictitious, and was due solely to omissions on the previous occasion. But even in 1881 the success attained was not complete, and at the next enumeration Mr. Baillie was of opinion that the population had been understated to the extent of more than a third of a million; if so, the true rate of increase between 1881 and 1891 was only 5½ per cent. The harvests of that period were not specially good, but there was no serious crop failure, nor did the Provinces suffer from any unusual amount of sickness. There was therefore nothing to check the natural tendency of the population to multiply at a more rapid rate than usual after the losses it had sustained in the famine of 1877-79.

Conditions
affecting
movement
between 1891
and 1901

141. Since 1891 the Provinces have suffered from a succession of calamities. In the earlier part of the decade the rainfall was excessive and badly distributed, and not only caused serious damage, in many parts, to the crops, but also led to a severe outbreak of malarial fever, which, in 1894, raised the death-rate to an exceptional height and sapped the vitality of the people to such an extent that the birth-rate in 1895 was unusually low. Then followed several years of deficient rainfall. In 1895 the monsoon ceased early in September and in the ensuing cold weather there was scarcely any rain. The autumn harvest was in consequence 20 per cent. below the average and that of the following spring yielded barely three-fifths of the normal outturn. The eastern districts and those in the Central India plateau, or British Bundelkhand, where the loss of successive spring harvests had weakened the staying powers of the people, suffered most, and in the latter tract famine supervened. The monsoon of 1896 was even more unsatisfactory than that of 1895. Up to the third week in August the general prospects were fairly good, but the monsoon gradually became weaker, and September and October were practically rainless. The rains of the ensuing cold weather, moreover, were not sufficient to replenish the moisture in the soil. The autumn and spring harvests were thus both very short and the two combined are estimated to have yielded barely half the normal outturn.

This led to severe distress in almost all districts, while in many there was actual famine. The suffering was greatest in the Central India plateau and the Central Plain, in the south-west of the Western Plain, and in Jaunpur and Mirzapur. In February 1897 no less than 1½ million persons were attending the relief works. The number fell in March but rose again in April, and then rapidly declined, until July, when the advent of the next monsoon rendered further relief operations unnecessary. The efforts made to alleviate the distress were successful in preventing serious loss of life, and the death-rate of 1897, though high, was lower than in 1894, when there was no famine and the unhealthiness of the season was alone to blame.* The reported birth-rate in 1897 was the lowest of any year in the decade, but in 1898 it was normal, while in 1899 it was the highest on record (48 per 1,000).

142. With the exception of the Bundelkhand districts, it does not appear

Year	NUMBERS OF		Excess of emigrants.
	Immigrants.	Emigrants	
1891	799,137	1,370,144	571,007
1901	880,691	1,510,295	629,604

NOTE.—The number of emigrants here shown refers only to those found in other parts of India.

that the famine has had any general effect on the growth of the population and the explanation of the diminished rate of increase must be sought in other directions. The previous decade was one of recuperation after heavy famine losses, while the present one commenced with a normal population, the unhealthiness of its earlier years caused a high death rate and reduced the reproductive power of the people, and, lastly, high prices and the attractions of remunerative employment elsewhere led to extensive emigration, especially to Bengal, Assam, and Burma. These tracts contained 200,000 more natives of the United Provinces at the time of the present census than they had done ten years earlier. The number of emigrants to Bombay has declined, but this is probably due to a higher rate of mortality in the industrial centres of that Presidency rather than to a diminished amount of emigration. There was an exodus of nearly 150,000 persons to the West Indies, Fiji, and Natal during the decade, while the return flow from these places amounted to less than a third of the above figure. There was also a considerable movement from the Sub-Himalayan districts across the Nepal frontier, especially during the famine of 1896-97, but of its volume no precise information is available.

On the other hand, there were various circumstances which tended to mitigate the misfortunes due to adverse climatic conditions. The main system of canals had been completed prior to 1891, but numerous minor channels and drainage cuts were made during the decade and the area irrigated in 1896-97 was far greater than it had ever been before. The length of railways in the Provinces rose from 2,699 miles in 1891 to 3,569 in 1901 and the high prices of 1899 and 1900 benefited the cultivators in the tracts that escaped crop failure, who were able in those years to export 1½ million tons of grain to other parts of India. There was also a great development of various industrial undertakings, chiefly at Cawnpore and Agra, and nearly 30,000 hands were employed in cotton, woollen and jute mills, leather factories, brass and iron works, and the like, compared with barely half that number at the commencement of the decade.

143. We have so far been considering the growth of the population as a whole. Turning to natural divisions, we find a considerable increase, as compared with 1891, in the Western Gangetic plain, a very slight one in the Central plain, Himalaya-West and Sub-Himalaya West, practically no change in the Sub-Himalaya East, and a considerable decline in the Eastern plain, the Central India plateau and Mirzapur. The growth of the population in the Western plain is noteworthy, following as it does on a long period of stagnation. It is most marked in the Doab, or tract of country lying between the Jumna and the Ganges, which is largely protected from drought by canals, and which benefited during the period under review by the high prices induced by famine elsewhere. It had suffered in the previous decade from waterlogging, but this has to a great extent disappeared, thanks partly to the lighter rainfall of recent years, and partly to the cutting of numerous drainage

Movement by natural divisions.

* The reported death-rate in 1897, moreover, was as high in several districts where the distress was slight as it was in those where famine conditions prevailed.

channels to carry off the surface water.* The Etah district which has gained 23 per cent. in the course of ten years shows the most remarkable rate of growth of any tract in these Provinces, but it is mainly a process of recovery from previous losses, and the population is still only a per cent. greater than it was in 1872; its progress during the last decade may perhaps be ascribed, in part at least, to the extensive reductions of land revenue granted in the tracts which had suffered from waterlogging, or where experience showed that the original assessment had been pitched too high.† In the Himalayan and Sub-Himalayan area to the west, the chief point to be noticed is the great unhealthiness of the terai which has caused a loss of population in the districts which chiefly contain it.

The eastern part of the Sub-Himalayan area discloses curious variations. Basti and Bahraich show steady progress but Gorakhpur, on the confines of Bihar, has lost ground, and so too has Gonda, owing partly to famine, partly to unhealthiness and partly to floods in 1894. In the Central Plain (excluding Hardoi) the general tendency of the population has been to increase in the north and west and to decline in the east and south, where it adjoins the decadent tracts in the Central India plateau and the Eastern plain.

144 The districts in the Central India plateau or British Bundelkhand have long suffered from adverse conditions and special measures have recently been taken by the local Government to relieve the indebtedness of the landowners. Prior to the commencement of the decade the crops, especially those of the spring harvest, had been damaged for some years by excessive moisture and the growth of a peculiarly persistent weed. Then came three virulent epidemics of cholera and the famine of 1896-97, when, in one district, more than two-fifths of the population were fain to seek a livelihood on the relief works. That this last calamity was the main factor in causing a loss of population seems clear from the circumstance that the only district which has escaped with only a nominal decrease is Jalaun, where the indebtedness of the landowners is just as serious as it is in other parts of Bundelkhand but where the crops are largely protected by irrigation. The vital statistics show an exceptionally high death-rate in 1896 and 1897 combined with a very low birth-rate in this latter year and 1898. In Mirzapur, also, famine is probably to blame for the decadent condition of the population.

The Eastern plain, which is for the most part permanently settled, has sustained a general decline. It suffered in the famine year, and also from the fever epidemic and from loss of crops caused by the excessive rains of 1894, but Mr Burn considers that the main cause of its decadence is not so much an actual decrease in the population as a more extended emigration to other parts of India and to the Colonies. It is this tract which chiefly supplies agricultural, mining and factory labourers to Bengal and Assam,

* More than 400 miles of these channels were cut in the Bulandshahr district alone.

† It is impossible to gauge the general effect of revenue assessments on the prosperity of the people and consequently on the growth of population. The productiveness of the land and the security of the crop vary greatly, and what may be a high assessment in one place would be a very low one in another. Moreover, although a low assessment in one tract, adjoining others where it is high, is likely to result in an influx of cultivators from the latter, it is by no means certain that a general low assessment is an unmixed benefit, and it is held by some authorities that, within limits, a high assessment acts as a spur and improves cultivation, and that the cultivators are better off with high rents than with low rents. As a general rule it may be said that all revenue settlements are so light that they are of small importance compared with other circumstances affecting population, such as famine, disease, irrigation and the like, and it is only in exceptional cases, where a high and inelastic assessment is accompanied by long continued bad seasons or other adverse conditions, that they lead to relinquishments and loss of population. In most provinces there have been too few settlements in recent years for it to be possible to correlate the results with those of successive censuses, and in any case the subject would be far too complicated for it to be possible to deal with it satisfactorily in a census report. The following extract from a note which I have received from Mr Burn may, however, be quoted in support of the view that, under ordinary circumstances, assessments have but little to do with the movement of the population —

"The most striking figures to my mind are those for Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Basti, and Gorakhpur. All of these except Meerut and Aligarh were settled between 1885 and 1891, under the same rules. Meerut and Aligarh have just been resettled. Between 1881 and 1891 (the last decade of the old settlement) Gorakhpur and Basti increased by 14 and 9 per cent. while Saharanpur, Muzaffarnagar and Bulandshahr only increased by 2, 2 and 3 per cent. Between 1891 and 1901, however, Gorakhpur decreased by 1.2 per cent. while Basti rose by 8 per cent., Saharanpur by 4 per cent., Muzaffarnagar by 18 per cent. and Bulandshahr by 20 per cent. The variations between east (Gorakhpur and Basti) and west (Saharanpur, Muzaffarnagar, and Bulandshahr) in 1881-1891 and 1891-1901 are in exactly opposite directions, though there is absolutely nothing either in the old or new settlements to explain such variations. Similarly, if we take adjacent and similar districts e.g., Meerut and Bulandshahr, in Meerut 1891-1901 was the closing decade of a settlement and the population only rose by 11 per cent., while in Bulandshahr in the first decade of a settlement the population substantially increased the revenue, the population increased by 20 per cent. Or take Pudukkottai which was settled between 1890 and 1895 (or a year later) and Madras which was settled 25 years ago. The increase is almost exactly equal."

and probably also to Burma and Bombay, though for the latter Provinces detailed figures showing the actual districts of the United Provinces from which their immigrants were received are not forthcoming; nor are any such statistics available for Bengal and Assam in 1891. It is impossible therefore to show by actual figures the extent to which these districts have lost since 1891 by a greater amount of emigration.

145. **Baroda.**—After gaining between 10 and 11 per cent. in each of the periods 1872-81 and 1881-91 the Baroda State has lost more than 19 per cent of the population recorded in the latter year and its inhabitants now number 1,952,692 or 44,906 less than they did in 1872.

Summary
of movements
from 1872
to 1901.

It is unnecessary to discuss at length the causes of these variations as they are identical with those already described in the case of the British territory in Gujarāt. It will suffice to say that the State enjoyed a full measure of prosperity up to 1899-1900 and that the shocking depopulation which has since taken place is due entirely to the ravages of the famine of that year. The number of emigrants from Baroda has declined from 252,000 to 202,000 and the immigrants to the State now number only 173,000 compared with 312,000 in 1891. It appears, therefore, that the survivors from among the persons born in Baroda who sought support on British relief works during the famine had all returned before the census, and that the only way in which emigration can have affected the result is by the disappearance of some of the foreigners enumerated in the State in 1891. Even this can be held responsible for only a small fraction of the decrease which, in the main, is due to deaths from famine and its attendant ailments. The decrease though less than in the smaller Native States in the neighbourhood, is greater than in the adjacent British territory. Mr. Dalal says in his report that "a much heavier reduction would have taken place, but for the flow of charity from Government, and from the people in some cases. The State expended nearly a crore of rupees for the relief of the famine-stricken in various ways. The effect of the affording of relief to such a large extent has been that the people have now learnt that the State is not represented only by the Tax-Collector and the Village School-master, but by those whose hearts go in sympathy with them in times of calamity, or in other words, that the *Sirkar* is their real *Ma-bap* and not simply an idle pageant" The Famine Commissioners of 1901, however, came to the conclusion that "the relief measures adopted in the Baroda State were so inadequate as to force Baroda subjects to resort in large numbers to British territory for relief."

Conditions
affecting
movement
between 1891
and 1901

146. **Cochin and Travancore.**—The Cochin and Travancore States are attached to the Madras Government, and in paragraph 131 above their population has been included in that of the Madras States, but their census was taken independently, and separate reports on the results have been prepared locally. The small State of Cochin is in a flourishing condition, and its present population of 812,025 is greater by 12½ per cent than it was in 1891 and by 35 per cent. than in 1875, the year of the first census. Although it has a density of nearly 600 persons to the square mile, it gains considerably by the movements of the people between it and contiguous territories, *viz.*, the Travancore State and the Malabar and Coimbatore districts of Madras. The excess of immigrants over emigrants has risen during the decade from 15,000 to 35,000, and this accounts for nearly a quarter of the net increase. The remainder is due to natural development. The State escaped the horrors of famine; the rise of prices consequent on scarcity elsewhere has been beneficial to the cultivators, but has caused suffering to the poorer classes, especially as the local food supplies are insufficient and grain has to be imported from outside.

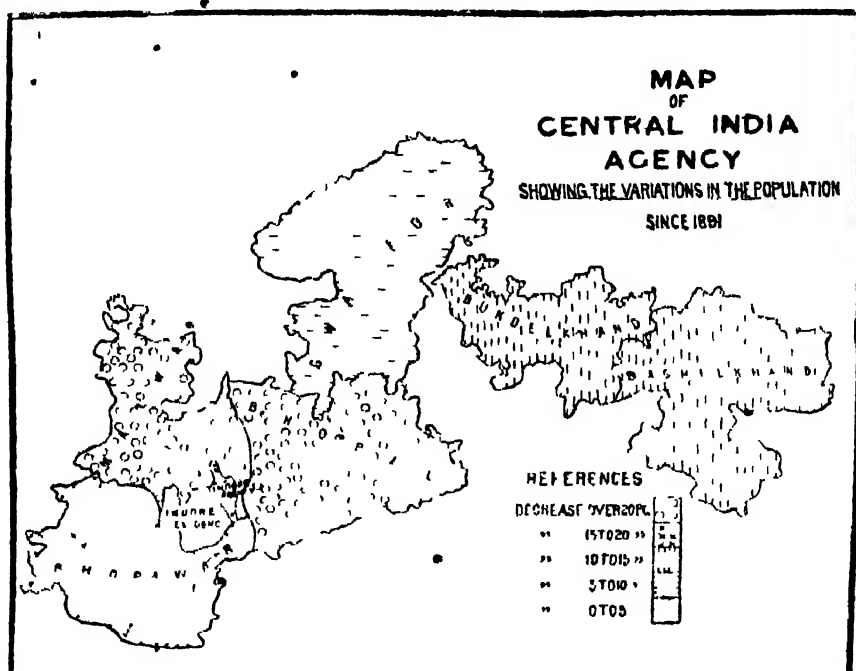
147. **Travancore**, the ancient Kerala, is credited with an even greater increase, *viz.*, from 2,557,736 to 2,952,157, or at the rate of 15.4 per cent. During the previous decade, however, an increment of only 6.5 per cent. was returned, as compared with 20.4 in Cochin, and Mr. Stuart was of opinion that the low rate was attributable, in part at least, to omissions from the enumeration. This view is shared by the present Travancore Census Superintendent who gives reasons for believing that the population was understated in 1891 to the extent of some 83,000 persons, and if so, the true rate of increase since that year is only

11·8 per cent. The decade has been fairly prosperous and healthy, and free from famine, though there was some scarcity in the southern tracts which it is now proposed to irrigate from the Kothayar river. The number of immigrants has risen from 17 to 55 thousand, and the emigrants from 14 to 24 thousand, and the net gain by migration represents about 1 per cent. on the population of 1891.

The increase is greatest in the eastern half of the State, which is hilly and sparsely populated, and especially in the Cardamom Hills, the home of the plant from which it gets its name, where it amounts to 46·8 per cent. Only a quarter of the denizens of this thinly inhabited tract, which occupies the north-eastern corner of the State, on the confines of the Coimbatore and Madura districts of Madras, were born within its borders; one-eighth come from other parts of Travancore, and three-fifths are immigrants from outside the State, attracted by the growing plantations of tea and cardamoms; the number of these incomers was greater than usual at the time when the census was taken, as the harvesting of the cardamom crop was then in full swing. The number of Europeans, who are found chiefly on the plantations, has risen from 360 to 534 in the course of the decade. This district now contains seven times the population enumerated in 1875, but there is ample room for further expansion and the density is still only 22 to the square mile.

Summary of
movements
from 1881 to
1901

148 **Central India.**—The first systematic attempt to ascertain the population of the Central India Agency was made in 1881, but it was beset with the



usual difficulties attending a pioneer census, and the population of 9,261,907 shown by the returns was probably considerably less than the actual number. The rise of 11·4 per cent brought out by the census of 1891, which showed a population of 10,818,812, was therefore due largely to greater accuracy. The returns of the present census give a population of 8,628,781 or less by 16·4 per cent. than that of the previous enumeration. Cap-

tain Luard thinks that the population was overstated in 1891, and this may possibly have been the case amongst the comparative small communities of Bhils and Gonds for whom an estimate only was made, but it is doubtful if any serious over-statement was possible where a regular census was carried out. A defective census may lead to omissions but it cannot well result in double enumeration to any appreciable extent. The tabulation of the results is believed to have been imperfectly supervised, but though this might lead to errors of detail, it would not be likely to increase the figures showing the total population dealt with.

Conditions
affecting
movement
between 1891
and 1901

The loss of population is greatest in the western States, i.e., in the elevated tract lying along the Arnavalli, Satpura and Vindhya ranges. In several years the rainfall was deficient and the crops were poor. This tract did not suffer from scarcity in 1897, but in 1899, an almost complete failure of the monsoon, following close on a deficient rainfall in the previous year, brought on a very severe famine, which was accompanied, as usual, by cholera and bowel complaints and a sort of paralysis attributed to the eating of a kind of wild pulse. The mortality was very high, and resulted at the present census in a decrease of more than two-fifths in the population of the Malwa Agency, and of nearly the same proportion in that of Bhopal. In the Indore Agency nearly a third, and in Bhopawar a sixth, of the population of

1891 has disappeared. These figures, appalling as they are, have their counterpart in the adjoining States of Rajputana. The least unsatisfactory figures in this tract are those for the Indore Residency, where the decrement is only 5 per cent., an amount sufficiently large in itself, but small in comparison with the enormous losses in the neighbouring States. During the famine there was a great deal of emigration to the Central Provinces and Indore, from Bhopal and other States, but by the time of the census the great majority of the survivors from amongst these refugees had returned to their homes, and, in the case of the Central Provinces, the number of persons who owned Central India as their birth-place, was considerably less than in 1891. It seems clear, therefore, that the decrease recorded in the population of these States is due in the main to the heavy mortality of the famine year. The States of Bundelkhand and Baghelkhand escaped the famine of 1899-1900 but were hit very hard by that of 1896-97. They had, moreover, suffered from excessive rainfall, which saturated the heavy black-cotton soil, in the earlier years of the decade. The public health was bad in several years, especially in 1897. The result of these adverse conditions is a decline of 10·2 per cent. in Bundelkhand and of 13·0 per cent. in Baghelkhand.

149. Gwalior.—In the northern part of Gwalior the conditions are similar to those of the States just mentioned, but in the south-west, in the Malwa and Isagarh Prants, a considerable area shares the conditions already described in the case of the western States, and here, while there was very little distress in 1896-97, there was a severe famine in 1899-1900. The net loss of population during the decade was 13·2 per cent. It occurred mainly in the elevated country in the south-west; in the Gwalior Prant to the north, three districts show an increase, and three a decrease, of population, which, however, in no case exceeds 10 per cent.

150. Hyderabad.—The first census of the Hyderabad State was effected in 1881 when the population was returned at 9,845,594 as compared with 11,141,142 at the present census. There was a growth of 17·1 per cent. during the decade 1881-91, which has now been followed by a decrease of 3·4 per cent. The method of enumeration in 1881 seems to have been in many ways defective and no report on the operations was issued. In the report on the census of 1891 it is stated that much of the increase then ascertained was attributable to greater accuracy. Much of it was also due to the recovery of the people from the famine of 1876-78, and the six southern districts which had suffered most showed a rate of growth twice as great as the other portions of the State.

Summary of
movements
from 1881
to 1901

Since 1891 the State has suffered from a succession of bad seasons and in only two years was the rainfall favourable to the crops. The western districts, which adjoin the Bombay Deccan, shared in the famine of 1896-97, the distress being greatest in the south-western tract which had suffered most severely in 1876-78. The evil effects of this famine were, however, slight compared with those of its successor of 1899-1900, which was most severely felt in the north-western districts, Aurangabad, Birh, Parbhani and Naldurg or Oosmanabad. Plague appeared in 1897 in the tract adjoining Bombay and, by the time of the census, 7,811 deaths from the disease had been reported, of which considerably more than a third occurred in the district of Oosmanabad. The immigrants from outside fell from 383,713 in 1891 to 325,197 at the present census and the emigrants from 387,983 to 317,790. Migration therefore had only a minor share in producing the decrease disclosed by the present census, which is attributable mainly to a succession of bad seasons and especially to the famine of 1899-1900.

Conditions
affecting
movement
between 1891
and 1901

That this famine is chiefly to blame is shown by the fact that practically the whole of the decrement has occurred in the tract where its ravages were mainly felt, which has lost nearly a fifth of the population that it contained in 1891. The districts which bore the brunt of the scarcity in 1896-97, with only one exception, show a substantial increase, amounting in the case of Gulbarga and Lingsugur to 14 and 9 per cent., respectively. The other southern districts, except Raichur, also show a fair general improvement, and so does Sirpur-Tandur in the north-east. The only district outside the zone of the famine of 1899-1900 which has sustained more than a nominal loss of population is Elgandal which lies between the progressive districts of Sirpur-Tandur and

Movement
in different
districts

Warangal, and, in the absence of any other explanation, it would seem that there must have been some changes, intentional or accidental, in the boundary line followed in 1891.*

Summary of
movements
from 1873 to
1901

151. Kashmir.—A rough count of the population of Kashmir was effected in 1873, but the result was quite unreliable and we must look to the enumeration of 1891 as giving, for the first time, fairly accurate demographic data. Since then the population has risen from 2,543,952 to 2,905,578 or by 14·2 per cent. The Jammu Province in the south, with a present population of 1,521,307, has grown by 5·7 per cent., while in Kashmir proper (1,157,394 inhabitants) the gain is close on 22 per cent., and in the frontier districts (226,877 inhabitants) it is 46 per cent. The rapid growth in the latter is due to the development of Gilgit which now contains more than two and-a-half times the population recorded at the last census.

Conditions
affecting
movement
between 1891
and 1901

152. The period since 1891 has on the whole been prosperous. The greater part of Jammu suffered from famine in 1899-1900; Kashmir proper escaped but prices have risen, owing to improved communications and better facilities for trade. The people have profited greatly by the extension of settlement operations, amongst the beneficial results of which may be mentioned a greater fixity of tenure, the substitution of cash for revenue in kind, the abolition of middlemen and of various vexatious imposts, the regulation of the system of forced labour and the remission of outstanding arrears of revenue. There have been two severe epidemics of cholera, but otherwise the public health has been fairly good. Steady progress in vaccination has checked one of the chief causes of mortality and the Srinagar water-works and improved city sanitation have mitigated the ravages of cholera. The number of emigrants from Kashmir to the Punjab has fallen from 111,775 in 1881 to 87,545 in 1891 and 83,240 at the present census. The Census Superintendent attributes this to the improvements which have been made of late years in the administration of the State. The immigrants of all kinds number 85,597 compared with 69,257 in 1891, they come chiefly from the districts on the Punjab frontier—Sialkot, Gurdaspur, Gujrat and Hazara. Amongst both emigrants and immigrants females are slightly more numerous than males. The causes of the varying rate of progress disclosed by different parts of the State have not been very clearly stated in the local report. The general increase is assigned in the main to the advantages which the cultivators have derived from the settlement operations, but in one of the Jammu districts, Blimbar, the portion which has been settled has lost population and the net increase in the district at large comes from two tahsils which have not yet been brought under settlement. It is understood that the latter escaped the famine while those which had been settled did not. There seem to have been some alterations of boundaries since 1891.

Summary of
movements
from 1871 to
1901

153 Mysore—In 1871 the inhabitants of Mysore numbered 5,055,402, but in 1876-78 the people were overwhelmed by the most disastrous famine known in Southern India for many years, which wrought more havoc in Mysore than anywhere else. Four successive monsoons failed to bring their normal supply of rain. Immense sums were expended to help the starving people, and at one time nearly three-fifths of the inhabitants were on relief works. The mortality was terrible and it has been estimated that one-quarter of the population was swept away by starvation or disease. When the next census was taken in 1881, the number of inhabitants had fallen to 4,186,188, a loss of 17·2 per cent. Since then the recovery has been rapid, and an increase of 18·1 per cent. in 1891 has now been followed by a further gain of 12 per cent. The population now stands at 5,539,399, or more by 9·6 per cent. than it was in 1872. The rapid progress between 1881 and 1891 was the usual sequel of a bad famine, which carries off the very old and very young and leaves an exceptionally large proportion of the population at the reproductive ages.

Conditions
affecting
movement
between
1891 and
1901

154. Since 1891 the agricultural conditions have on the whole been good. The crops failed to some extent in the *Maidán*, or eastern portion of the State, in 1891-92 and again in 1896-97, but the distress was local and did not amount to famine. The public health was fairly satisfactory until plague appeared in

* The only known alterations have merely resulted in a reduction of the area of the district by about 4 square miles which would be quite insufficient to account for the diminution in the population.

August 1898 and did great mischief. The total registered mortality from this cause up to the time of the census exceeded 35,000, of which more than half occurred in the cities of Mysore and Bangalore, including the Civil and Military Station. The epidemic had also serious indirect consequences in the dislocation of trade, and the return to their old homes of many settlers from other tracts. On the other hand, the rapid development of the Kolar Gold Mines and the consequent general expansion of trade and industrial activity, including the construction of the Cauvery Power Works, where electricity is generated for working the machinery in the Gold Fields a hundred miles away, coupled with the extension of the State system of railways and irrigation works, have not only provided the labouring classes within the State with remunerative employment and greatly augmented the general prosperity of the people, but have also stimulated immigration in a remarkable degree. As stated above, the plague which was raging when the census was taken, must have driven away many of the temporary settlers, but in spite of this the number of immigrants has risen from 195,798 at the previous, to 306,263 at the present, census. The number of emigrants has fallen from 143,533 to 131,682. The net gain from these movements of the people accounts for about a sixth of the total growth of the population.

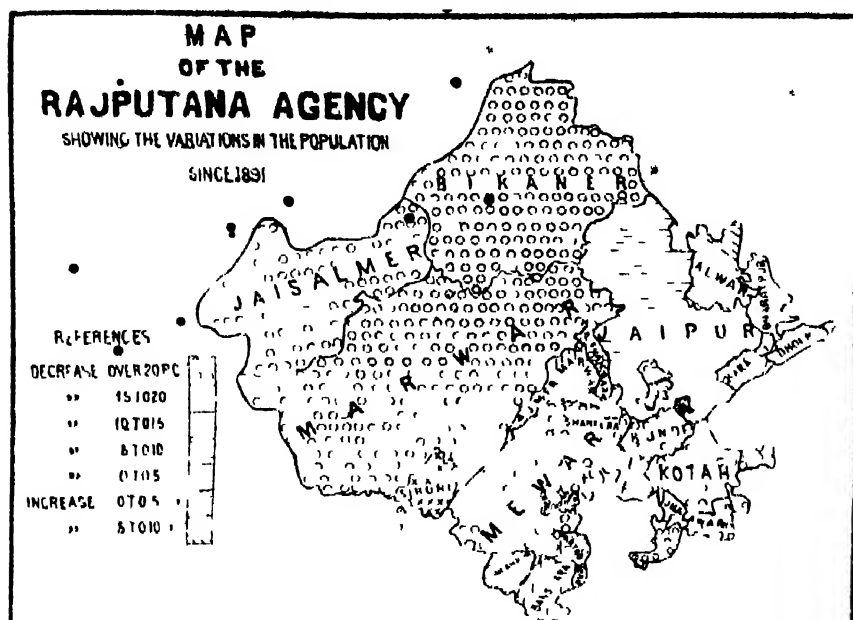
155. Of the eight districts into which the State is divided, the greatest increase is in Kolar, where it amounts to no less than 22·4 per cent, of which nearly three-fifths is due to immigration from outside the limits of the State. The sparsely inhabited districts of Chitaldrug and Tumkur, also in the *Maidān*, show an exceptionally rapid growth, but the latter has still not quite recovered from the losses it sustained by famine more than twenty years ago. In Mysore and Bangalore the increases of 9·5 and 12·3 per cent., respectively, would have been greater but for the set back which the urban population in these tracts has received, owing to direct and indirect losses from plague. The *Malnad*, or hilly tract in the west of the State, is less progressive. A fair gain has been registered in the coffee-growing districts of Kadur and Hasan, but Shimoga, on the Bombay border, has only a nominal increase. Very little coffee is grown here, the climate is unhealthy, and the population has long been nearly stationary.

156 **Rajputana**—The States composing the Rajputana Agency, after gaining just over 2 millions between 1881, when the first census was taken, and 1891, have lost in the last decade no less than 2,257,203 or 18·9 per cent. The population at the present census stands at 9,723,301, which is less by 210,898 than it was twenty years earlier. The decade preceding the census of 1891 was one of prosperity and steady growth, and the apparent increase was possibly exaggerated by omissions from the pioneer count of 1881 in a tract where an operation of the kind is beset with special difficulties.*

157. Since 1891 the country has suffered from a succession of seasons of deficient or ill-distributed rainfall. In the first year of the decade severe scarcity was felt in Marwar, Bikaner and Jaisalmer, the three States lying west of the Aravalli range, in the region of sandy desert and scanty rainfall which forms the "North-West Dry Area," described in the last Chapter. In 1895 the same tract obtained barely two-thirds of its ordinary rainfall and relief operations were started in Jaisalmer. The next season was also unfavourable and famine conditions spread into Bikaner; Marwar was affected by scarcity and there was also some distress east of the Aravallis, in Dholpur and Bharatpur, which lie in the "Indo-Gangetic plain, west." The rainfall was again deficient in 1898, while in 1899 the monsoon practically ceased towards the end of July, and the abnormal heat withered the grass and standing crops, dried up many of the irrigation tanks and wells, and brought on a famine more severe even than that of 1868-69. Everything that the supreme Government could do to cope with the calamity was done. Loans were made to the various durbars on favourable terms, a Famine Commissioner was appointed, and Engineers and Staff Corps officers were deputed to assist in supervising the administration of relief. The durbars were, however, unprepared, and valuable time was lost in making the necessary arrangements and collecting the required establishments. The distress continued to grow until June 1900, when 5 per cent. of the population was in receipt of relief.* During the next

* For a severe famine the proportion of persons receiving relief was very small. In some parts of British territory, in the course of the same famine, over 20 per cent. of the population were at one time in receipt of State aid.

three months, however, heavy rain fell and the numbers on the relief works rapidly dwindled away. Fever epidemics broke out in 1892, 1899 and 1900, the most virulent of all being that which followed the heavy rainfall of August and September 1900,



which was aided in its ravages by the impaired vitality of the people. Vital statistics scarcely exist in Rajputana, but the general consensus of opinion is that the mortality from fever, from August 1900 to February 1901, exceeded that caused by want of food in the period during which famine conditions prevailed. However that may be, it is probable that the population at the

beginning of 1899 was at least as great as in 1891, and that the whole of the decrease which has taken place is attributable to famine and disease during the two years immediately preceding the present census. It has been said that much of the loss is due to emigration, and it is well known that during the famine the relief works in the adjoining British territory were crowded with half-starved wanderers from Rajputana. In the Rajputana Famine Report the number of famine emigrants is placed at nearly three-quarters of a million. The traditional custom of the inhabitants of the vast desert tracts forming the western States is to emigrate with their flocks and herds on the first sign of scarcity, before the grass withers and the scanty sources of water supply dry up and a well-known proverb indicative of this practice has already been quoted*. At the same time the number of persons born in Rajputana who were found in other parts of India on the night of the census was almost the same as it was ten years earlier, and it would seem, therefore, that the famine refugees must either have died or returned home before that date, so that emigration of natives of the Rajputana States cannot be held responsible for any appreciable part of the falling off. The number of immigrants from outside, however, has decreased during the decade by about 173,000 and this may possibly be due mainly to the return to their old homes of persons born elsewhere. But even so, the losses owing to famine and its sequelæ must exceed two millions or, say, 17½ per cent.

Movements
in individual
States

158 The loss of population in the three States west of the Aravallis is about a quarter of the total recorded in 1891, and in Jaisalmer, where there are now only 5 persons to the square mile, it exceeds a third. The figures for some of the southern States on the east side of the Aravallis are even more appalling, and Mewar, Bundi, Patabgarh and Jhalawar have all lost more than two-fifths of their inhabitants†. Further north, in Jaipur, the famine was severe almost

* *Ante*, paragraph 9.

† In one or two States in this part of the Agency where the loss is less, or where there is an apparent gain of population, the comparison is unreliable, as it leaves out of the account the Bhil and Grassia population at the time of the census of 1891. The present Census Superintendent, being of opinion that the estimates of the strength of these tribes made in 1881 and 1891 for certain states or parts of states where they were not regularly enumerated were pitched too high, excluded them altogether, thus reducing the population of Rajputana, as shown in the census tables of 1881 and 1891 by 10,313 and 229,889 respectively. The question whether, and if so, to what extent, these figures were in excess of the truth is a very complicated one, and is obscured not only by the circumstance that there may have been migration from enumerated to unenumerated tracts, but also by the want of definite information as to the precise areas to which some of the estimates apply, and by the undoubted fact that the Bhils must have suffered in the famine to a greater extent than other sections of the community, so that the results for the latter cannot be taken as indicative of the losses sustained by these wild and timid people. On the whole, however, the evidence that their number was seriously over-estimated at previous enumerations is, to my mind, not very convincing, and in any case, the error due to the inclusion of these figures, even if they are somewhat high, cannot be so great as that resulting from their total omission. If they be added to the population for 1881 and 1891 shown in Table II of the present Census the decrease in Rajputana as a whole comes to 3·7 per cent as compared with 1881, and 20½ per cent as compared with 1891. The corresponding variations per cent since 1891 for the individual States affected by the exclusion of the estimated Bhil and Grassia population are as follows:—

Mewar — 14·7, Dungapur — 29·6, Khasalgah — 18·8, Sirohi — 19·0

everywhere, but thanks to the excellence of the relief operations, and to their timely inauguration, the decrease in population is only 5·8 per cent. In the north-west, where the population is more dense and the country merges into the Indo-Gangetic plain, the full force of the famine was not felt, but malarial fever was very prevalent. Bharatpur and Dholpur show a loss of 2 and 3 per cent. respectively; Karauli is stationary, and Alwar, which has benefited for some years by careful and wise administration, has an increase of nearly 8 per cent.

General Summary.

159. The movement of the population in each of the provinces and states which make up this great Empire having now been briefly reviewed, an attempt will be made to focus the main results and to present them from a wider and more general aspect. The proportionate growth of the population disclosed by the returns for successive enumerations is shown in subsidiary table No I. The gross increase of the population during the decade preceding the census of 1901 was 2·4 per cent, compared with 13·1 and 23·1 per cent in the periods 1881-91 and 1872-81 respectively, but, as already explained, the real progress is obscured by the gradual extension of the area included within the scope of the census operations. Of the increase of nearly 48 millions recorded in 1881, no less than 33 millions was derived from the counting of new areas,* and of the increases of 34 millions and 7 millions registered in 1891 and 1901, 5½ millions and 2½ millions respectively were obtained in the same way. The exclusion of these fictitious gains reduces the rate of increase in the three periods 1872-1881, 1881-1891, and 1891-1901 to 6·8, 10·9 and 1·5 per cent respectively.

160. It is less easy to estimate the effect of the gradual improvement which has taken place in the accuracy of each fresh enumeration. There can be no doubt whatever that serious omissions occurred in 1872,† and in the report on the results of the present census in Bengal, where some striking instances of the incompleteness of that pioneer count are quoted, the conclusion is arrived at that, of the increase of 11½ per cent recorded in 1881, half, at the very least, was due to this cause. In the United Provinces, which endured the "horrors of famine in 1877-78, the Census Superintendent of 1881 was of opinion that the gain of 5·3 per cent then disclosed was wholly fictitious, being due solely to faulty enumeration in 1872. It is not likely that the census of that year in these two provinces which, with their states, contained between them more than half the total population then enumerated, was below the general standard of accuracy attained elsewhere, and if this assumption be granted, the increase of population between 1872 and 1881, which has been reduced to 6·8 per cent by the exclusion of areas dealt with for the first time in 1881, almost or wholly disappears‡. In any case it may fairly be concluded that the true rate of progress during this period was certainly not greater than that during the decade preceding the Census of 1901.

Between 1881 and 1891 the gain due to the greater completeness of the enumeration was much smaller, but it was nevertheless considerable. In Bengal it has been estimated, on fairly reasonable grounds, to amount to half a million, and in the United Provinces, to more than a third of a million. It must have been proportionately greater in the tracts of which the first census was taken in 1891, and it seems probable that in India as a whole the gain on this account may have been more, but was certainly not less, than 1 per cent. In

* The new areas are as follows —

In 1881—

Convict Settlement in Andamans, Central India Agency, Hyderabad, Punjab States, Raipur in Manipur.

In 1891—

North Lushai, Upper Burma (excluding Shan States), Quetta, Kashmir, Sikkim

In 1901—

Native tribes in Andamans, Manipur (schedules destroyed in 1891), part of Lushai Hills, Shan States, part of Upper Burma, Malakand, Dir, Swat, Chitral, Kuniam and Shurani Country in North West Frontier Province, Baluchistan and Baluchistan Agency

† In some Provinces the first enumeration was effected in other years, viz., in 1871 in Madras and Mysore, in 1875 in Coshin and Travancore, and in 1868 in the Punjab

‡ The deficiency in Madras in 1871 was subsequently estimated to be about 850,000. If so, the degree of error there was less than in Bengal and the United Provinces, but owing to the famine which intervened before the next enumeration, it was more difficult there than elsewhere to form an opinion as to the extent to which the Census of 1871 was defective.

1891 the general standard of accuracy was so high that there was little room for further improvement.*

Estimated
true variation
in population
since 1872

161. It may therefore be concluded that the true growth of the population since 1872 has been as follows :—

From 1872 to 1881—possibly nil, and certainly not more than 1·5 per cent.

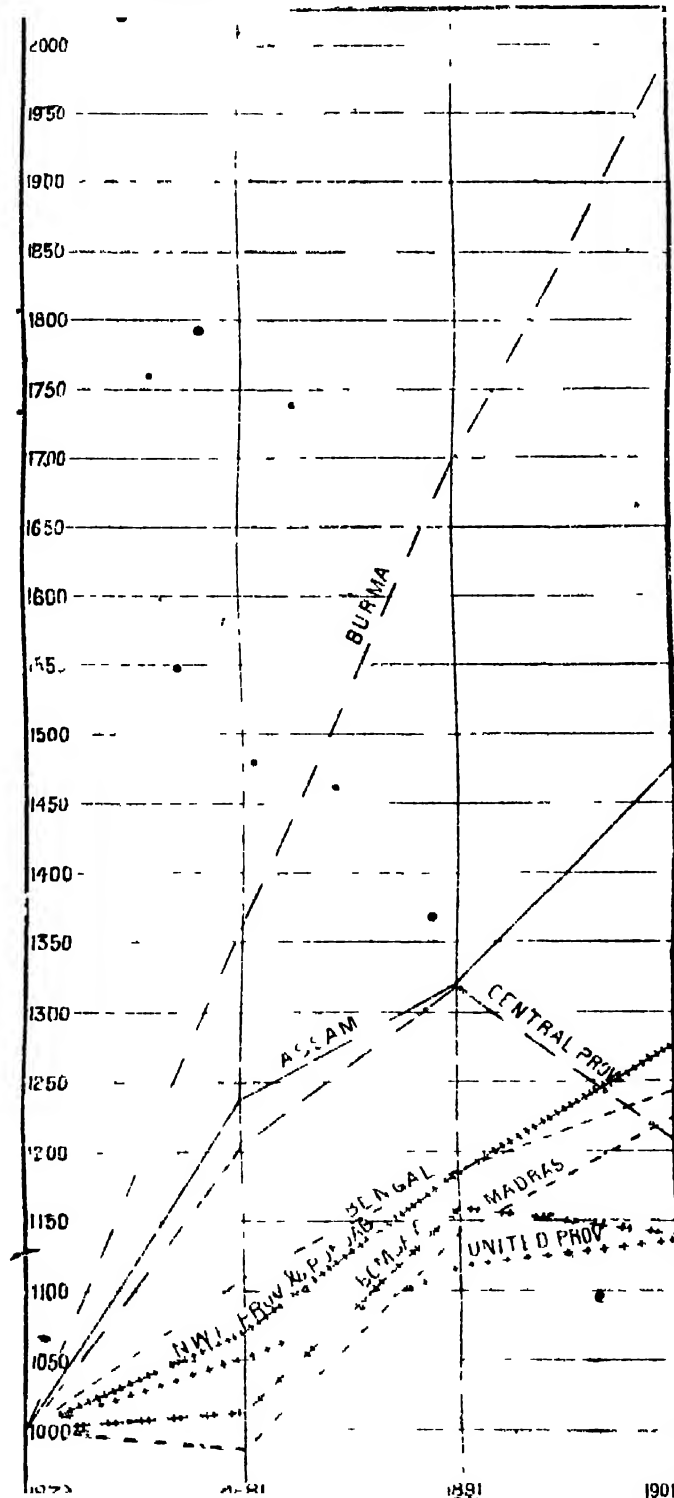
From 1881 to 1891—about 9·8 per cent.

From 1891 to 1901—about 1·5 per cent.

But analysis
of variations,
1891—
1901

162. The net increase disclosed by successive enumerations is the resultant of very divergent figures for individual provinces and states. The changes that have taken place in the population of each political unit since 1872 have already been discussed, and the results for some of the main provinces are shown in graphic

Diagram showing the variation since 1872 per 1,000 of the population in certain Provinces



form in the accompanying diagram. In spite of the exclusion, in the case of Burma, of the gain due to the enumeration of fresh areas, this province shows a far more rapid rate of progress than any other part of India, and its population has almost doubled in the short space of 29 years. Assam also is growing fast, but its true increase, since 1891, is obscured by the addition of new tracts not dealt with in that year. The Central Provinces, which rivalled Assam in its progress during the first two periods dealt with, has experienced a severe set-back and its population is now almost the same as it was 20 years ago. Bombay also has lost ground but, thanks to the steady growth of Sind, where the physical and climatic conditions resemble those of the Punjab rather than Bombay proper, the famine has produced a comparatively small decrease in the population taken as a whole. The only other remark suggested by an examination of this diagram is the general irregularity of the curves. In Burma the rate of growth is both rapid and uniform, but elsewhere periods of decadence have been followed by periods of rapid growth, and these again have been marked by a slackened rate of increase in the ensuing decade. This would seem to suggest a specially rapid development during the next 10 years in Bombay proper and the Central Provinces, but it is always unsafe to prophesy and is especially so at the present time, when the grim shadow of the plague is still growing broader and blacker.

163. Taking the district or corresponding division of Native States as the unit, I have distinguished in subsidiary table No V the areas in each province

* There was a considerable increase owing to better enumeration in Upper Burma and a few remote tracts chiefly in Native States, but the total population of these areas is so small compared with that of the whole country, that the consequent gain is inappreciable, and is certainly not greater than the loss due to new omissions in places where plague was prevalent at the time when the census of 1901 was taken.

or state which have added to their population from those which have lost ground during the last decade. It thus appears that the increase of 1.5 per cent. in India as a whole (excluding the gain due to the enumeration of new areas) is the combination of a growth of 8.6 per cent. in an area of 913,016 square miles, with a population at the present census of 193,790,615 persons and a density of 205 persons per square mile, with a decline of 10.1 per cent in an area of 606,973 square miles with a present population of 97,886,087 and a density of 161 persons to the square mile. In British territory there has been a gain of 8.2 per cent. over about three-quarters of the total area and population, and a loss of 5.7 per cent. in the remaining one-quarter. In the States and Agencies the area showing a gain is considerably less than that where there has been a decline; the population of the former has risen from 25 to nearly 28 millions, or at the rate of 11.1 per cent., while that of the latter has fallen from 41 to 34 millions, a decrease of 17.3 per cent. The net result of these variations is a gain of 3.9 per cent. in the population of British territory and a decline of 6.6 per cent. in that of the Native States.

164 It is impossible in the space available to deal at any length with the returns of births and deaths collected in various parts of India. These statistics are based on information received periodically from village watchmen and other similar subordinates, who possess little or no education and over whom it is impossible to exercise very close supervision. In the larger provinces considerable attention has been paid, of recent years, to the improvement of the returns and, in some cases, so far as the total number of vital occurrences is concerned, the degree of error has been greatly reduced, so that even if a certain number of births and deaths are still left unreported, the consequent inaccuracy is believed to be small and fairly constant. In subsidiary table No VI, a comparison will be found between the actual population of the main tracts where vital statistics are recorded, as shown by the census of 1901, with the results obtained by adding to the corresponding population of 1891 the births reported during the decade and deducting the deaths. The figures are in some cases obscured by migration, especially in Assam and the United Provinces, but elsewhere the estimated population indicated by the vital statistics corresponds to a remarkable degree with that ascertained at the census. It appears, therefore, that these returns now afford a fairly correct indication, not only of the variations that take place from time to time in the public health, but also of the actual growth or decadence of the population, and reference has accordingly been made to them repeatedly in the notes on the movement of the population of different provinces as affording a measure of the comparative healthiness or unhealthiness of different seasons and of the effects of famine on the mortality.

In other directions very little reliance can be placed on these returns. The error in respect of age at death is just as great as it is in the case of the age return of the census. The diagnosis of diseases is also very imperfect. Cholera, dysentery and small-pox are known, but most other complaints are indiscriminately classed as fever.

165 The movement of the population depends on various factors, falling broadly into two distinct groups. On the one hand, there are the social practices of the people, amongst which may be enumerated the age at, and universality of, marriage, the extent to which widowers and widows remarry, the prevalence of abortion and infanticide, and the degree of care and intelligence with which children are ushered into life, and brought up, especially during the critical first few months after birth. On the other, there are the physical, material or external factors which affect their longevity and fecundity, such as famine, changes in their general material condition, disease, and migration. The former group of factors, which change but slowly and whose influence is fairly constant for long periods of time, will be dealt with when the age and marriage statistics are brought under examination, and the discussion in this Chapter will be confined to the second group, *i.e.*, to the external factors, which are those that chiefly affect the fluctuations in the rate of growth in successive decades. It may, however, be noted in respect of the social factors that marriage is almost universal and that,

* It seems probable that the deaths of small children are not so fully reported as those of adults and that the standard of accuracy falls off whenever epidemic disease is specially prevalent. This certainly happens with plague and it is probably also the case with cholera. At the same time it would appear, from the general result described above, that the omissions from both sides of the account more or less balance one another.

although the prohibition of widow marriage amongst large sections of the community renders sterile a considerable number of women capable of bearing children, the birth-rate in India is far higher than in any country of Western Europe. Owing partly to a heavy mortality amongst small children, the death-rate is also high, but the resultant tendency of the social factors is to produce a fairly rapid growth of the population. The extent to which this growth is fostered or checked depends upon the external factors which will now be passed in review.*

Migration.

166 In the case of some individual provinces and states, such as Assam, Burma and Mysore, we have seen that immigration plays an important part in determining the variation in the population, but in India, as a whole, it is an item of very small account. The total number of immigrants from foreign countries at the present census was only 42,000, or 2 per 1,000 of the population, compared with 600,000 in 1891 and 409,000 in 1881. Of the corresponding

	Number of emigrants	
	1891	1881
Ceylon	436,622	264,580
Straits Settlements	57,150	53,927

emigration complete information is not available. The number of persons born in India who were enumerated in Ceylon and the Straits Settlements at the last two censuses of those Colonies is noted in the margin. We have no means of gauging the number of emigrants to Nepal, Afghanistan, Tibet and Bhotan, but in the case of Nepal,

at least, the number is believed to be considerable. Neither are the census returns available for European Countries or British Colonies other than the two already mentioned. The number of natives of India residing in Europe is inconsiderable, while for the Colonies etc., we may, in the absence of the census figures, refer to those obtained by the Protector of Emigrants. According to the returns

British Guiana	125,875
Trinidad	85,615
Mauritius	265,163
Natal	65,925
Fiji	15,368
Jamaica	15,278
Surinam	18,000
St. Lucia	1,200
Martinique	3,764
Guadeloupe	15,276

TOTAL 611,464

published by him there were no less than 611,464 natives of India residing in the places shown in the margin during the year 1900.† There was also, up to the 31st March 1901, a total emigration of 34,147 natives of India recruited for work in Uganda, of whom 9,864 had again returned to India on the termination of their agreements and 710 had died. There were in addition 2,430 free emigrants regarding whose subsequent movements details are not available. It may be assumed that about 26,000 natives of India were

actually in Uganda at the time of the census. It was estimated in 1898 that there were at that time 5,000 natives of India in the Transvaal, and a year later the number in Cape Colony, Basutoland and South Rhodesia was reported to be 3,913, there are believed to be about 10,000 in Zanzibar and the census of 1891 showed about 15,000 in Australia and New Zealand, for all these places combined we may place the total at 35,000. If we assume that Nepal contains the same number of emigrants from India as are received from that State by the British districts which adjoin it, or about 158,000, and, making a rough guess, take 50,000, as the number who are resident in Afghanistan, Bhotan and other countries for which no definite information is forthcoming, the aggregate number of emigrants amounts to 1,374,000, or more by 732,000 than the number of immigrants counted in India on the 1st March 1901. The adverse balance, though considerable by itself, forms a very small fraction of the total population and migration may, therefore, be neglected when dealing with the movement of the population in India as a whole.

167. We have seen that the main influence causing fluctuations in the rate of growth of a community at different periods is its material condition, and in

Adverse conditions of decade (1) Famine

* The rapid rate at which the population is capable of growing when all conditions are favourable will be seen from the results already described in the case of Lower Burma and Eastern Bengal.

† The statistics of emigration to the Colonies show that in all 198,585 persons left India during the decade of whom 120,550 were natives of the United Provinces, 30,775 of the Punjab, 28,314 of Madras, and 11,957 of Bengal, the balance being made up of smaller contributions by the other provinces and various native states (Financial and Commercial Statistics of British India, Ninth issue, page 486). Having regard to the number of natives of India actually resident in the Colonies it seems doubtful if the returns of emigration are complete. About one-quarter of the emigrants eventually return home, bringing with them savings which, in the decade preceding the present census, were estimated at 70 lakhs of rupees.

a country like India, where two-thirds of the people are dependent on agriculture, this varies with the state of the harvests. When the crops are good the people are prosperous, but when they fail the pinch of scarcity is at once felt. It has been repeatedly shown, in discussing the movement of population in the different provinces and states, how intimately the variations which have been revealed at succeeding enumerations are connected with the occurrence of famine. When there has been a famine in the period between two censuses, the population is stationary or decadent, but when there has been no famine, it is progressive. The rate of growth is greatest during a period of good crops following close on the heels of a famine. The reason for this is partly that a calamity of the sort causes a high mortality, chiefly amongst the very old and the very young and other persons already of a feeble constitution, so that when it is over, the population contains an unusually high proportion of healthy persons at the reproductive ages, and partly because, by reducing the number of dependents to be supported, its ultimate effect is to improve the resources of the poorer classes and so encourage them to have larger families.* Thus Orissa, which lost a quarter of its population in the famine of 1865-67, gained nearly 18 per cent. in the period between the censuses of 1872 and 1881. Madras having suffered severely in the famine of 1876-78, added 15.1 per cent. to its population between 1881 and 1891, and Bombay, which shared in the same calamity, had an almost identical increment.

169. In India, as a whole, the decade ending in 1891 was remarkably free from serious crop failure, while the preceding period witnessed several widespread famines. It is thus easy to see why the population was very nearly stationary between 1872 and 1881 and grew rapidly in the next ten years. But it was not likely that such rapid progress would be maintained. Even with a continuance of good seasons a period of rapid increase would naturally be succeeded by one of slower growth owing to the diminished number of persons at the reproductive ages about 15 years after a famine and the exceptionally large number of young children. Moreover good seasons and bad go in cycles and a succession of fat years is invariably followed by a series of lean ones. This sequence of events was noticed by Mr. Baines who, in dealing with the results of the census of 1891, wrote —

"The rate of increase thus implied is not likely to be maintained, and after so many years of average seasons, previous experience in India warrants the expectation of a check to the growth of population, such as that which occurred between 1861 and 1871 and 1871 and 1881. The measures to prevent the loss of life that have been briefly touched upon in Chapter III will, no doubt, mitigate the severity with which this check is applied, so far as its direct action is in question, but, nevertheless, it will not be surprising to those who have even glanced at these statistics, if there be in 1911, if not 10 years sooner, a considerable readjustment of the age distribution at the beginning and end of the tables."

The anticipated has happened and the period from 1891 to 1901 was even more disastrous to the cultivators than that from 1872 to 1881. The adverse conditions of the decade have been repeatedly mentioned in the notes on movement in individual provinces and states, but it will be convenient to give a brief summary of their leading features in India as a whole. In 1891-92 there was scarcity over a considerable area in Madras and Bombay, and in parts of Bihar. In 1895 a weak monsoon led to extensive crop-failure in the southern districts of the United Provinces, and a sudden cessation of the rains of 1896 resulted in famine in the United Provinces, the Central Provinces, and Berar, and parts of Madras, Bombay, Bengal, the Punjab, Upper Burma, Rajputana, Central India and Hyderabad. Altogether an area of about 300,000 square miles with a population of nearly 70 millions was affected and, on the average, two million persons were relieved daily during the twelve months from October 1896 to September 1897; the number rose to more than 4 millions at the time of greatest distress. The loss of food crops was placed at 18 or 19

* It has more than once been pointed out by Settlement Officers that the size of the family varies with the material condition of the people, that a landless labourer's family is on the average smaller than that of a small cultivator, and the family of the latter than that of one with a large holding, *vide* Muzaffarpur Settlement Report, page 364, and Report on Material Condition of small Agriculturists and Labourers in the Gaya District, pages 17 and 23.

A rapid rise in the birth-rate after any unusual catastrophe is a well known phenomenon. M. Bertillon says — "la natalité s'abaisse, à la suite de la nuptialité, lorsque la population subit quelque désastre (guerre, disette, chômage, etc.). La période de crise, une fois passée, la natalité devient plus forte qu'elle n'était avant la crise comme si la population éprouvait le besoin de rattraper le temps perdu." (Cours Élémentaire de Statistique Administrative, page 477.)

million tons. The Commission appointed to review the system on which relief was administered in this famine and to gather up its lessons came to the conclusion that "while the areas over which intense or severe distress prevailed were greater than in any previous famine, the degree of success attained in the relief of distress and the saving of human life was, if not complete, far greater than any that has yet been recorded in famines that are at all comparable with it."

In 1899 the monsoon again failed, and the results were even more disastrous, for though the population affected was slightly less than in 1896-97, famine conditions prevailed over an area half as great again and with less easy means of communication, the drought was much more severe, the people had not yet recovered from the previous visitation, the mortality amongst cattle from want of fodder and water was far heavier, and the tracts which suffered most lay for the greater part in Native States, where the relief organization was necessarily less perfect than in British territory. In the height of this famine there were for weeks together over six million persons in receipt of relief, and the value of the agricultural production of the year was estimated by the Viceroy to have been 60 millions sterling below the average, there was also a loss of some millions of cattle.

170 It is impossible to say with any pretence to accuracy what was the actual mortality caused by these calamities. The Commission of 1901 thought that about a million deaths were attributable to the famine of 1899-1900 in British territory, and it would probably be safe to assume that another three millions must have occurred in the Native States, which contained more than three-fifths of the population afflicted and where the relief operations were generally far less successful. No estimate has been made of the excess mortality in 1896-97 but it cannot have been much less than a million. The total mortality due to the two famines may therefore be taken roughly at five millions. The diminished vitality of the people resulted also in a heavy fall in the birth-rate, but this was to some extent counterbalanced by an unusually high rate of reproduction when the people had recovered their normal condition.

(ii) Plague

171 Excluding a small tract in the Himalayas where it has long been endemic, bubonic plague made its first appearance in India in modern times in Bombay City in September 1896 and, after spreading over the Western Presidency, notwithstanding the measures taken to prevent its dissemination, gradually extended its ravages to other parts of India. By the date of the census the recorded mortality was nearly half a million, to which Bombay contributed seven-tenths and Bengal two-thirds of the remainder, Mysore with 33,731 reported deaths had suffered heavily in proportion to its population and so too had Baroda and Hyderabad. The extent to which the actual number of deaths exceeded that reported is uncertain, but it is known that the difference was very considerable and it may be assumed that the true mortality from plague was not less than three-quarters of a million and may possibly have been a million.

The effect is smaller than might have been expected

172 In a period which has witnessed the two greatest famines of the century and the appearance of a new and deadly disease, the wonder is, not that the pace at which the population has grown is less than it was during the previous ten years, when the rate of progress was more rapid than usual, but that there should have been any increment at all. In ancient times the occurrence of a severe famine was marked by the disappearance of a third or a fourth of the population of the area afflicted, and the fact that in British India the famines of 1896-97 and 1899-1900 should have resulted in an excess mortality in those years of only 15 and 30 per mille respectively is a remarkable proof of the efficiency of the relief operations.*

Conditions making for progress in railways

173 In other respects the past decade has been one of great progress. The railways open in 1890-91 had an aggregate length of 17,000 miles, which in 1900-01 had grown to 25,000, an increase of more than 50 per cent. The advantages of these improved communications and of the facilities which they afford to trade and migration are most marked in times of scarcity. It has been proved by recent experience that, even in years of severe famine, India has

* In a few of the smaller and more backward Native States the famine of 1899-1900 caused a terrible loss of population but as a general rule, even in Native States, the administration of relief was far more efficient and effective than it had ever been before. A brief account of some of the famines which occurred before the advent of the British and of their disastrous consequences will be found in Chapter III of Mr C. W. McMin's little book on 'Famine: The Half Truths, Untruths'.

ample supplies of food, in areas beyond the afflicted zone, to support the whole population, and the extension of railway communication has now made it possible to carry it to the tracts where the crops have failed. During the twelve months ending 30th September 1900 food grains and pulses to the extent of nearly 72 million maunds were imported by the affected provinces (other than the Punjab), which in ordinary years export about 7 million maunds, and prices never rose to the extreme height common in former periods of scarcity. But for the railways it would have been impossible to effect these vast movements of grain, which, be it observed, were brought about entirely by the ordinary business agency of the country without any special assistance from Government.*

174. Great strides have been made of late years in the development of the State system of canals for irrigation purposes, and in 1901, 43,000 miles of canals were in operation, compared with only 9,000 ten years previously. The total irrigated area in British India now averages 30 million acres, of which about one-half is watered by irrigation works owned or controlled by the State. The great benefit conferred by these works was clearly shown in the famine years, especially in the Punjab, where the crops raised from the irrigated fields of the Chenab Colony were of the greatest use in meeting the demand for food in other parts of that Province.†

175. The persons mainly affected by famine are the landless labourers; the actual cultivators usually have sufficient food stocks or savings to enable them to tide over bad times, but the labouring classes live from hand to mouth and, on the advent of famine, are deprived at once of the means of employment on which they chiefly depend. Not only is there less field work to be done, but what little there is, is done by the land occupants themselves. The most effective remedy, therefore, lies in the opening out of other means of livelihood, and great strides have been made in this direction during the past ten years. The expansion of the railway system above described has caused an increase in the number of natives employed in connection with it from 248 to 357 thousand. The coal mines of Bengal have shown a remarkable development, and in 1901 the output of coal was 5½ million tons, or more than three times the quantity won in 1891; the production in other parts of India, which now exceeds a million tons, has nearly doubled during the same period. The average number of labourers employed daily in the coal mines has risen from 35,000 to 95,000. The quantity of petroleum extracted (almost wholly in Burma) exceeded 50 million gallons in 1901 compared with barely one-eighth of that quantity ten years previously. The value of gold taken from the Mysore mines has risen from one to three crores of rupees. The production of manganese ore in Madras, of tin in Burma, and of mica in Bengal and Madras has also increased considerably.

176. The development of the coal mines has provided the country with an abundant supply of cheap fuel and has greatly encouraged all kinds of industrial activity. The jute mills of Bengal number 34 against 25 in 1891 and the number of their employes has grown from 61 to 110 thousand; there are also 168 jute presses employing 21,000 persons compared with 33 employing 8,000 persons in 1891. The number of cotton mills in Bombay has risen from 89 to 138 and that of the labourers engaged in them from 78 to 107 thousand. The jute industry is still a monopoly of Bengal, but rivals to the cotton mills of Bombay are springing into existence in many places. In respect of other industries the development, though less marked, has been very considerable, and cotton ginning and pressing mills, iron and brass foundries, paper mills, oil mills, potteries, sugar factories and tanneries are rapidly growing in numbers and importance in different parts of the country. During the decennium the foreign trade of India by sea has risen in value from 1,956 to 2,547 millions of rupees, the coasting trade from 778 to 948 millions, and the foreign trade by land from 83 to 136 millions. Joint stock companies have risen in number from 950

* The importance of good communications as a means of mitigating the suffering caused by famine is well illustrated by the history of the Orissa Famine of 1865-66 when ships laden with grain were prevented by the winds of the south-west monsoon from leaving the port of Calcutta, and it was impossible to supply food to the starving people until hundreds of thousands had died.

† An account of the advantages derived from irrigation in the famine of 1896-97 and of the progress made in developing the State system of irrigation during the previous 20 years will be found in the "Narrative of the Famine in India" by Mr T. W. Holderness, paragraphs 103 to 111.

to 1,366, and their paid up capital has increased from 266 to 370 millions of rupees. Everything seems to point to the fact that India has entered upon an era of great industrial development, and if so, not only may a marked improvement in the material condition of the poorer classes be looked for, but the danger of loss of life, in the event of crop failure, will in future be very greatly diminished. The demand for labour in Calcutta and other great industrial centres already far exceeds the supply and one of the problems of the immediate future is the devising of means whereby the employers may be brought into touch with the classes who would benefit most by taking to the new means of livelihood created by British capital.

(v) Cultiva-
tion of
Special Pro-
ducts

177. The cultivation of coffee and indigo has received a check and the area under these crops is less than it was ten years ago. The area under tea, on the other hand, has risen from 345 to 525 thousand acres and the number of tea-garden coolies in a still greater proportion; the total number employed in 1900 was 719,000. In Bengal the profitable jute plant is replacing other less remunerative crops and the area devoted to its cultivation in 1900 was reported to be $2\frac{1}{4}$ million acres, or more by 50 per cent. than it was ten years previously. The crop statistics of Bengal, especially those of earlier years, are very unreliable, but it is a matter of general observation that the cultivation of jute is spreading in all directions.

(vi) Pro-
bable im-
provement
in Public
health

178. It is impossible in the present state of the vital statistics, which have only recently attained a fair degree of accuracy, to draw from them any conclusions as to variations in the death-rate, and whatever opinion may be formed on this subject must be based solely on *a priori* grounds. In all the larger towns the water-supply and sanitary arrangements have been greatly improved. Much has been done in the smaller towns also, and even in the villages. Great care is taken to guard against epidemic disease at the fairs and festivals where the people assemble in large numbers, and in most cases they can now reach them by rail and thus escape the horrors which attended the old journey by road, while they no longer disseminate disease in the villages along their line of march. When cholera breaks out, efforts are made to eradicate it by the disinfection of wells and other sources of water-supply. The protection of the people from small-pox by means of vaccination is making steady progress. Where the public health is found to be suffering from obstructed drainage, efforts are made to remove the defect, and numerous artificial drainage channels have been cut during the last few years, chiefly in Upper India. Lastly the number of dispensaries established by Government and local bodies is rapidly increasing and medical aid is thus being brought nearer to the people. It would seem that these and other measures cannot fail to have a marked effect, and that, apart from plague and the obscure fever epidemics, such as the "Burdwan fever" or the "*Kalá-ázár*" of Assam, which break out from time to time, the general health of the people must be steadily improving.*

The Outlook
for the
Future

179. With all these causes making for progress, the present outlook is a hopeful one, and unless famine should again supervene, there is every prospect of a steady growth of prosperity which is likely to bear fruit in an accelerated rate of increase of the population during the next few years.

It may be said that India has already more inhabitants than it can support, but this is not really the case. It will be seen from subsidiary table III of the last Chapter, in which the unit is the district or state,† that a fifth of the total population of the country is congregated on less than a twentieth of the area, where there are more than 600 persons to the square mile, a quarter more on a twelfth of the area, carrying from 400 to 600 per square mile, and nearly a fifth on an eighth of the area with a density between 200 and 400. Taking these figures together we find that nearly two-thirds of the total population of India occupy only a quarter of the whole area, while the remaining one-third is scattered over three-quarters of the area, which is still very sparsely inhabited and nowhere contains as many as 200 persons to the square mile.

There are no doubt certain localities, chiefly in parts of Bihar and in the east of the United Provinces, where the pressure on the soil is already felt, but

* Although not specially liable to epidemic disease, the whole of the Sub-Himalayan region from the Punjab to Assam is, and has long been, very unhealthy and the population is generally decadent in spite of the existence of large areas of waste land fit for cultivation. Climate is still a more important factor than density in determining the growth or decay of the population.

† In Hyderabad, Kashmir, and Mysore the divisions corresponding to British districts have been taken.

it is believed that with more scientific farming the present produce of the soil might be greatly increased, in which case not only would the dearth of land now felt disappear, but room would be made for an even greater population. There are, moreover, many tracts where, even under present conditions, there is ample room for expansion. There seems to be no reason why Burma as a whole should not support a population at least half as dense as that of Bengal, with its extensive areas of hill and ravine in the Chota Nagpur plateau and elsewhere, in which case its inhabitants would number nearly 60 millions in the place of the 10½ millions it now contains. The waste lands of Assam are crying aloud for colonists and even in densely-populated Bengal there are extensive areas still awaiting reclamation*. Lastly, many tracts which are now barren and inhospitable and support only a scanty population can be made productive by means of an artificial supply of water. Parts of South Bihar that were very sparsely inhabited only twenty-five years ago now carry a fairly dense population, owing to the construction, by the people themselves, of reservoirs and water channels which have enabled them to substitute rice for scantier and more precarious crops. We have already seen how the sandy desert between the Sutlej and the Chenáb has been transformed in a few short years into valuable corn fields. But what has yet been done is perhaps only a small instalment of that which the future has in store. There is enough water in the rivers of India, now running useless to the sea, to render fit for the plough many millions of acres at present barren and uncultivable. The great desert in the west of Rajputana has barely five inhabitants to the square mile, but there is evidence that it was well-peopled in ancient times, before the rivers that once flowed through it took another course, and it seems not impossible that some scheme of irrigation, bolder than any yet devised, may restore its lost fertility.

180. Overcrowding, moreover, is a purely relative term, and mere density of population means but little unless it is correlated with the degree of productiveness of the soil. There is probably no part of India where the people are more prosperous than they are in Eastern Bengal, but although more than three-quarters of the inhabitants of this tract are dependent on agriculture, the density is unusually great, rising to 952 persons per square mile in the Dacca district and to 848 in Tippera, the population moreover is still growing very rapidly, the increase since 1872 in the two districts named being 45 and 51 per cent. respectively†.

It has been shown in the case of Bengal that, with a few exceptions for which there are special reasons, the absolute growth of the population is greater in the thickly populated tracts than it is in those which are more sparsely inhabited‡ and it will be seen from subsidiary table No. IV at the end of this chapter that the same appears to be the case generally. The figures in this table are less conclusive than those in the Bengal Report, which are based upon the statistics for police circles, as the district has been taken as the unit, and a district covers so large an area that the mean density is often the outcome of very divergent proportions in the smaller administrative units of which it is composed. The main result, however, remains the same, and the greatest growth of the population has occurred in districts which in 1891 had already a density of from 500 to 600 persons per square mile, the next greatest increment is recorded for districts with from 600 to 700, then follow in order the districts with a population in 1891 of less than 100, 200 to 300, 300 to 400, 400 to 500, and 700 and over, while at the bottom of the list are those with a population of 100 to 200§. The advantage held by tracts with a comparatively dense population would be even more marked if we excluded Burma, the circumstances of which are exceptional, and the Punjab, where the growth of the Chenáb colony has disturbed the figures. Elsewhere the more

* Such as the Barind, the Machupur jungle, the Sundarbans, the Western Dnars, &c.

† It is curious to notice that Dr. Voelker, in his book on the Improvement of Indian Agriculture, mentions Dacca as a place where native agricultural methods are indifferent and susceptible of improvement, while he instances Gujarat as a tract where existing methods cannot well be ameliorated. Both Dacca and Gujarat have an alluvial soil, but while the former supports with ease nearly a thousand persons to the square mile, Gujarat with barely a quarter of that number is impoverished.

‡ *Ante*, paragraph 99.

§ This result differs from that arrived at in 1891 but on that occasion the true rates of increase were obscured by the gains derived from the greater accuracy of the enumeration, these were largest in the more sparsely inhabited tracts where the deficiencies in the Census of 1881 were most marked.

thinly inhabited tracts, show a net decrease since 1891. It must, however, be remembered that these are the areas that suffered most from the famine, and at the next census a relatively rapid rate of growth may be looked for in the areas in this category.

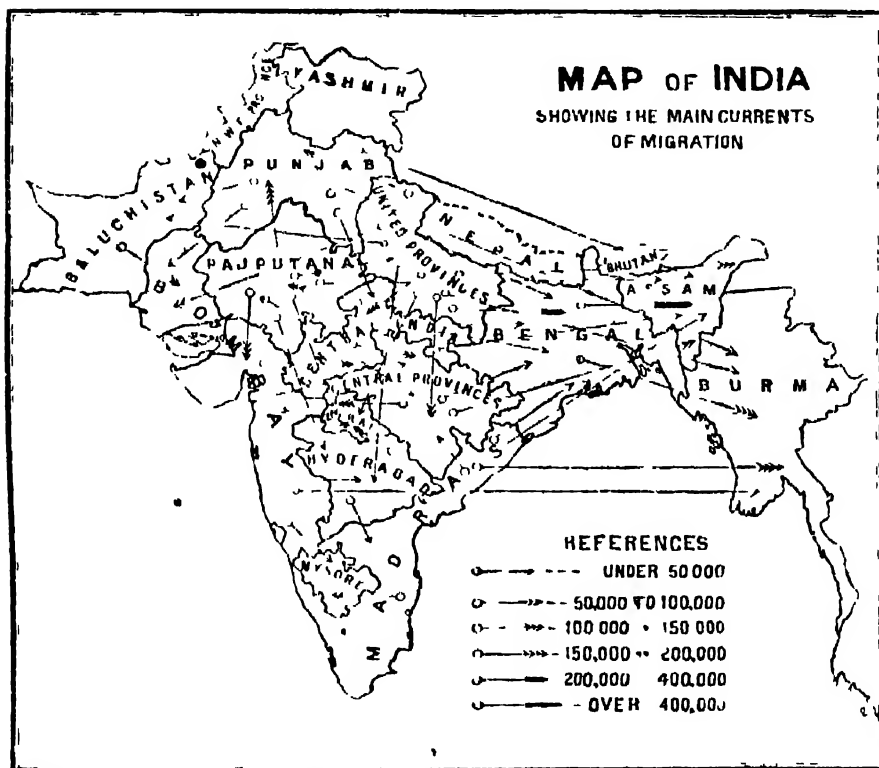
The population of India has been kept down in the past by war, famine and pestilence. The fear of war has been removed by the establishment of the *Pax Britannica*. Famine also is no longer the terrible scourge that it was in days gone by, and reasons have been given for hoping that its visitations will have a constantly diminishing effect. It is only in the case of pestilence that the prospect is gloomy. Plague is still spreading over the land and is taking a yearly increasing toll. How long it will continue to gain ground, or when it will disappear, it is impossible to predict, but this much seems certain, that it will be a factor to be taken serious count of when the time comes for reviewing the results of the next census.

Migration.

181. In the preceding pages the question of birth-place has been considered only in so

far as it causes an increase or decrease of population. It is now proposed to examine the figures from another point of view and to note the direction and character of the various streams of migration, the reasons that induce them and the extent to which they have grown in volume or declined since the date of the previous census. A brief summary of the results to be gleaned from Table XI—Birth-place will be found in subsidiary tables VII to X at the end of this Chap-

Object of
discussion



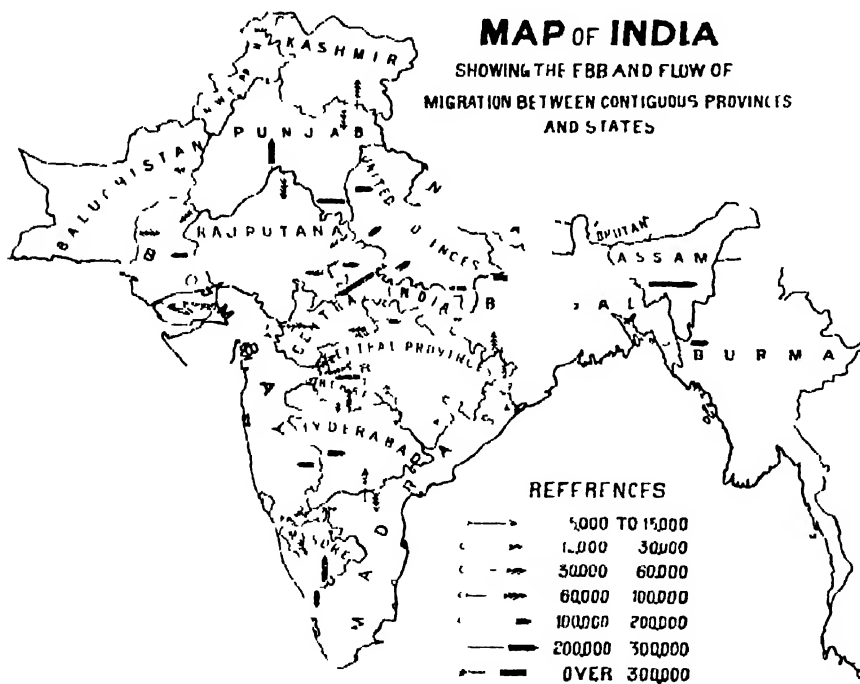
Note.—The arrows show the net result after deducting migration in the opposite direction.

ter, and a graphic representation of the main features of the same is given in the annexed map, on which all net movements of the population across the boundaries of provinces and states are indicated by means of arrows the heads of which indicate the net number of persons who have crossed from the one tract to the other. A similar map showing the actual ebb and flow of population across the boundaries of contiguous administrations will be found on the opposite page. Movements within a province or state are not shown in these maps, in some cases, where they are very considerable, they will be referred to further on, but for full details on this aspect of the question the provincial reports should be referred to.

The most striking feature in connection with this subject is the exceedingly small amount of migration in India. The natives of this country are an intensely home-loving people. The Hindu, in particular, when he leaves his permanent home, suffers from many disadvantages, he is cut off from his old social group, with the members of which he could eat, smoke and intermarry, and he finds it very difficult to enter a new one. It is therefore very seldom that he permanently severs his connection with his birth-place, and although he may go abroad in search of a better livelihood than he can get in his own country, his exile is, as a rule, only temporary, he endeavours to return home from time to time and he cherishes the hope of eventually resuming his residence there. The Muhammadan is not so circumscribed by caste prejudices, but in practice he is found to be almost equally reluctant to go very far from his ancestral home.

182. The census shows that of every 10,000 persons, only 927 were enumerated outside their district of birth. It appears, moreover, if one may generalize from the statistics for Bengal, that about two-thirds of those who were so enumerated had gone no further than some contiguous district, and such movements are not usually indicative of migration properly so called. In northern India at least, the marriage customs of the Hindus lead them to seek their brides outside the limits of their own village. The wife again often goes to her parents' home to be confined, especially in the case of her first pregnancy, and the amenities between relations residing in different villages lead to a good deal of visiting. Labourers from one village, again, often obtain temporary employment in a neighbouring one. Where the villages in question happen to lie on opposite sides of the boundary line between one political division and another, these minor movements find expression in the statistics of migration. There may be, and often is, a genuine movement from one district to another, as in the case of persons taking up land in the Sunderbans or in the Kistna delta. It was impossible at the census to make the enquiries necessary to distinguish true migration from petty movements of a casual or reciprocal nature, but, generally speaking, it may be said that in the case of contiguous areas most of the inter-district movements disclosed by the census belong to this latter type. When larger units, such as provinces and states, are considered the significance of the figures depends on the relation which exists between the length of the common boundary line and the population behind it. Baroda is shown by the returns to have given 196,000 persons or 10 per cent of

General
character of
migration



Note—The arrows here show the total volume of migration in each direction, when it exceeds 5,000

its population to Bombay and to have received in exchange 161,000 or 8 per cent, but almost the whole of this interchange is due to the fact that the Baroda State consists largely of small, detached blocks surrounded by British territory so that the casual movements from one village to another in the neighbourhood have obtained a prominence which they have not received in the case of more compact areas. Of the same character is a great part of the migration between the United Pro-

vinces and the States of the Central India Agency. The former gives to the latter 320,000 and receives 199,000, three-quarters of the emigrants from the United Provinces were enumerated in the adjacent territory of Baghelkhand, Bundelkhand and Gwalior, and nearly nine-tenths of its immigrants were found in the eight districts which lie along the boundary. Of the 133,000 persons born in the Punjab who were residing in the United Provinces at the time of the census, three-quarters were found in districts contiguous to the Punjab and of the corresponding immigrants to the Punjab, numbering 233,000, nearly two-thirds were in districts along the border of the United Provinces. It is impossible within the limits of this report to discuss all the movements of this nature, or to endeavour to trace the causes which have led to changes since the previous census. It must suffice to enumerate some of the more important features of migration properly so called, *i.e.*, of movements to a distant place, whether permanent or temporary, in search of employment.

Migration
to the tea
gardens of
Assam

183 The most notable instance of migration to a distance is perhaps that to the tea gardens of Assam. This backward province is the great centre of the tea industry; but as is natural where land is plentiful, the indigenes prefer the independence and ease of a cultivator's life to the regular work and discipline of the tea gardens. The local supply of labour is thus wholly inadequate and the planters, being forced to seek for coolies at a distance, have brought into existence the great recruiting business of whose attendant abuses so much has been heard in recent years, and the suppression of which was the main object of the new Labour Act passed in 1901. The chief recruiting grounds are the Chota Nagpur plateau in Bengal, the United Provinces, the Central Provinces, Madras and the Native States of Rajputana and Central India. Owing to the extension of tea cultivation there has of late been a great increase in the volume of recruitment, especially in 1897 when famine acted as a powerful stimulant

Year	Number of adult immigrants according to labour returns
1891	49,908
1892	56,050
1893	50,675
1894	46,530
1895	72,837
1896	81,115
1897	95,981
1898	49,169
1899	31,908
1900	62,733
TOTAL	590,856

to emigration. The consequence is that the foreign-born denizens of Assam have risen from half to three-quarters of a million, and now form no less than an eighth of the population of the province. To the total number Bengal contributes 503,880 as compared with 418,344 in 1891, or if we exclude emigrants from contiguous districts, 457,037 as compared with 368,071. Most of these emigrants belong to the hardy aboriginal tribes of the Chota Nagpur plateau, who are in especial demand, because they are not only more able to withstand the climate, but are capable of harder work than the softer people of the plains. The emigrants

from the United Provinces to Assam have increased from 57,851 to 108,900 and the emigrants from the Central Provinces from less than 4,000 to more than 81,000; those from Madras and Rajputana who now number more than 21,000 and 9,000, respectively, have doubled in number during the decade and the recruitment from the Central India Agency, which was practically non-existent ten years ago, has now resulted in the residence in Assam of more than 12,000 natives of that tract of country. Under the terms of the labour-contracts which they usually execute on recruitment, the coolies are bound to remain on the gardens to which they go for a period of from one to four years, and on the expiry of their agreements, large numbers either stay on as garden coolies or settle down as cultivators, or become carters, herdsmen or petty traders; even of those who return to their country, many eventually find their way back to Assam. The land held direct from Government by *ex-tea* garden coolies has risen from 32,000 acres in 1890 to 90,000 acres in 1900 and, in addition to this, a large area is occupied by them as sub-tenants. They are thus helping to colonize this fertile province, but the progress is very slow compared with the large amount of cultivable land still lying waste. The late Chief Commissioner, Sir Henry Cotton, drew up, and obtained sanction to, an elaborate scheme of colonization, in which highly favourable terms were offered to capitalists who would come forward to take up large holdings and settle upon them cultivators imported from Bengal, but the proposals have so far been infructuous. Possibly better results may follow on the opening of the line between Dhubri and Gauhati, which forms the only remaining link in the railway system connecting Assam Proper with Bengal and Bihar.

Migration
from Bengal
and Madras
to Burma

184 Burma is famous for its fertile rice fields but, like Assam, it is very sparsely peopled. The natives of the Province are far too well off to serve as coolies and it depends almost entirely on Madras and Bengal for the labourers in its towns and also, to a great extent, for its harvesters. The total immigrant population at the present census was 475,328, an increase of 47 per cent. as compared with 1891. Madras contributed about 190,000 towards the total and Bengal 157,000, the only other noticeable items were 34,000 from the United Provinces, 21,000 from the Punjab and rather less than 7,000 from Bombay. There were also nearly 60,000 settlers from places outside India, of whom the majority were Chinese (43,328), the British Islands supply 5,439, Nepal, 3,910 and Siam, 3,327. The migration from other parts of India to Burma, unlike that to Assam, is mainly temporary. Labourers go in large numbers for the harvest and the milling season and then return to their homes, with

their pockets full of money saved from the high wages obtainable in this prosperous province. More than two-thirds of the immigrants from Bengal were attracted by the rice harvest in Akyab and half those of the United Provinces were coolies in Rangoon town. Some few Madrasis settle down as cultivators in the districts of the Irrawaddy delta and a certain number of Maghs from Chittagong become permanent residents in Arakan, but the fact that among the natives of Bengal there are only 19 females to 100 males, and only 18 among the natives of Madras, clearly shows that the great majority are merely temporary visitors.* The Chinese, on the other hand, often seem to make a permanent home in the Province and Table XIII shows that the number of Chinese by race exceeds by nearly 50 per cent. the number born in China. Many of these are in reality half-breeds, the offspring of Chinese husbands and Burmese wives. Similar mixed unions often take place between Punjabis and other Indian immigrants and Burmese women but in such cases the caste system stands in the way; and the husband often ends by breaking off the connection and returning to his own country.

185. The enormous volume of emigration from the Chota Nagpur plateau in Bengal to the tea gardens of Assam, which has been mentioned above, is almost counterbalanced by the influx into Bengal of nearly half a million natives of the United Provinces. Of these less than one-fifth are accounted for by migration between the contiguous districts of the two provinces. The great majority are found in Bengal proper, especially in Central and West Bengal, where they find employment in the mills and coal mines, and as earth workers and field labourers, on better wages than are obtainable nearer home. Their number is steadily increasing to meet the growing demand for labour in the factories on the banks of the Hooghly and in the Bengal coal mines, and the total at the present census exceeded by more than a third that recorded in 1891, as already pointed out, however, the supply is far from being commensurate with the demand. Most of these immigrants stay only for a time and return periodically to their old homes, but a few, who are influenced by some special attraction, such as remunerative employment or a *liaison* with a woman of the country, settle permanently in Bengal. The emigration of natives of the United Provinces to Central India and the Punjab has already been adverted to, it is here to a great extent of a casual nature, but the balance against the United Provinces is in both cases somewhat heavy. The fact seems to be that, having regard to the capacity of the soil the United Provinces is more densely peopled than any other part of India, and a larger proportion of its inhabitants find it necessary to seek a livelihood beyond its limits. The total number of emigrants is 1,510,295 or 3.1 per cent. of the population while the corresponding inflow yields only 680,691 or 1.4 per cent. In 1891, the emigrants numbered 1,370,144 and the immigrants 799,137. Of the tracts to which emigrants go, other than those already mentioned, the most important is Bombay, many of whose mill hands are recruited in the United Provinces. Owing probably to plague, the number of those emigrants to Bombay (69,000) is less than it was in 1891.

186. Although separately administered by the Colonial Office, Ceylon is to all intents and purposes, an integral part of India, and the narrow strip of sea that intervenes is powerless

Year	Number of persons born in India who were enumerated in Ceylon
1881	276,788
1891	264,580
1901	436,622

to impede the strong current of migration which sets towards the island from the Indian peninsula. Unfortunately, in spite of a suggestion made by Mr. Risley before the census, the Ceylon birth place table shows all natives of this country under the one head "India," and does not distinguish between the different provinces and states, but it is

known that the vast majority of these emigrants go from Madras. The number has increased greatly since 1891, in consequence of the remarkable expansion of the tea industry, which depends on Indian coolies for its labour force, and which sprang into existence in the previous decade when coffee planting became

* Favourable rules for the grant of large areas of waste land to capitalists who will undertake to settle on them colonists from other parts of India were drawn up some years ago, but the results have not hitherto been very remarkable. The immigrants who take to cultivation usually do so on land which they have themselves acquired along the main lines of railway.

unprofitable owing to the blight which attacked the bushes. There is no system of recruitment such as exists in connection with the Assam tea gardens. The coolies come in gangs, each under its own headman, with whom, as in Darjeeling, the planter deals exclusively, leaving him to make his own arrangements with the individual coolies. The ports where these coolies mostly embark are in the Madura and Tanjore districts, and they nearly always make the journey in small sailing vessels which are not dealt with in the "statistics of free emigration by sea" collected under the orders of the Madras Government. The number who remain permanently in Ceylon is apparently not very great and the emigrants comprise only 63 women to every 100 men. The number of locally born 'Tamils' considerably exceeds the number born in India, but most of the former are the descendants of very ancient settlers, reputed to have been invited to the island by a king who came from Northern India some centuries before the Christian era, and comparatively few of them are the offspring of those of recent times.

Migration
between
British
territory
and Native
States

187 The net result of migration between British and native territories is noted below so far as the states and agencies in direct relation with the Government of India are concerned. It is impossible to give trustworthy figures for states in political relation with provincial Governments as the necessary distinction between the Native States and the British districts was not always observed by the Provincial Superintendents in the course of tabulating their statistics.

State or Agency	Gives to British territory		Receives from British territory		Net Result, gain + and loss —	
	1901	1891	1901	1891	1901	1891.
Baroda State	130,760	166,838	107,023	181,765	— 23,187	+ 15,427
Central India Agency	386,937	456,158	478,388	497,659	+ 91,451	+ 41,501
Hyderabad State	302,031	368,771	291,490	319,569	— 10,511	— 49,202
Kashmir State	81,312	85,729	81,197	66,647	— 115	— 19,082
Mysore State	129,468	138,113	296,601	187,061	+ 167,133	+ 48,948
Rajputana Agency	606,139	529,847	160,815	259,310	— 445,324	— 270,587
TOTAL	1,636,647	1,744,956	1,416,114	1,512,011	— 220,533	— 232,945

The net outcome of the above interchange of population is a loss to the Native States of 220,000, this is much the same as in 1891, but the figures for individual states have changed a great deal. The Central India Agency has gained by a considerable influx of settlers from British Bundelkhand, where the agricultural conditions have been deteriorating in recent years, and Mysore has attracted numerous labourers for its gold mines and other industrial undertakings. The ebb and flow between Kashmir and the Punjab which resulted in a considerable net loss to the former in 1891 have now reached an equilibrium. On the other hand the famine of 1900 seems to have driven from Baroda and Rajputana many of the settlers from British territory who formerly found a livelihood there.

Migration
within
Provincial
boundaries

188 In addition to the movements from one province or state to another, there are occasional instances deserving notice of migration within the limits of a province. Thus in Bengal, more than half a million natives of Bihar were enumerated in Bengal proper whither they had gone in search of labour like the immigrants from the United Provinces already referred to. The aboriginal tribes of the Chota Nagpur plateau are spreading to the north-east, and are bringing under cultivation the desolate uplands of the Barind, while large numbers of them have gone to the tea gardens of Jalpaiguri, whither they find their way without the help of the elaborate recruiting agency employed by the Assam tea gardens. In Burma between a third and two-fifths of a million persons born in Upper, were counted at the census in Lower, Burma. Irrigation is a constant cause of migration, and we have already seen how the barren waste of the Rechna Doab in the Punjab has received in the short space of ten years, a population of three-quarters of a million. A generation earlier the opening of canals in the old Sirsa district, now amalgamated with Hissar, caused the population to be doubled in less than thirty years. Similarly the protective works at the mouth of the Kistna river in Madras have attracted many settlers from the surrounding districts.

The marriage customs of the people do not usually affect the population, as the movements are reciprocal and so balance each other, but this is not always the case, and in some parts there is a trend in some particular direction. In the United Provinces it generally happens that the social status of a given caste decreases from west to east and as a woman is usually expected to marry a person equal or superior to herself, it follows that females are most commonly given in marriage to the west. The same rule extends into Bihar, and the Bābhāns and Rājputs of Darbhanga are in the habit of marrying their daughters to their better bred caste fellows of Ballia. So also in the Punjab, the Rājputs of Gurgaon have a rule that a daughter must always be given in marriage to the west and a wife taken from the east.

Lastly, there is the centripetal influence of great cities, *e. g.*, of Bombay which draws 146,000 immigrants from the Ratnagiri district and 170,000 from Satara, Poona and Kathiawar combined. This aspect of the subject has been more fully dealt with in the last chapter in connection with the statistics relating to cities.

189. The principal features of the immigration to India from foreign countries are given in subsidiary tables IX and X, the former shows for 1891 and the present census the main items for each province and state, and the latter, the detailed figures for India as a whole at each of the last three censuses. The influx of foreigners shows a steady increase and they now aggregate 641,854 against only 408,572 twenty years ago. As compared with 1891 the number of males born in the British Islands has fallen from 86,146 to 81,990, while that of females has risen from 12,358 to 14,663. The decrease in the case of males is, due to the absence in South Africa, at the time of the present census, of a portion of the European troops ordinarily stationed in India, if

Immigrants
from foreign
countries

Year	Number of British troop India including officers
1891	67,077
1901	60,965

these be excluded, the number of males born in the British Islands but enumerated in India shows an increase during the decade of about 2,000.* There are more persons born in Germany, France and Australia than there were ten years ago, and fewer natives of America and Africa; the decline in the case of the latter is due mainly to the figures for Aden, where seven-ninths of the total number of Africans are found, but there is also a noticeable diminution in the number enumerated in Karachi

and the Nizam's dominions. The increase in the German-born population occurs mainly in Bombay where the number now stands at 658 against 333 in 1891, it is perhaps due to the enumeration of sailors on German vessels anchored on the day of the census in the ports of Bombay and Aden, in the latter of which places alone nearly half the total number was found.

190. The immigrants from Nepal, who aggregate nearly a quarter of a million, are found chiefly in Bengal and the United Provinces which adjoin that State and contain respectively two-thirds and one-fifth of the total. The great majority (about 158,000), are merely settlers from the other side of the common boundary, who have married or taken up land in the contiguous districts in British territory, and who have been replaced in Nepal by an equal or greater number of emigrants from our side of the frontier. They are identical in physical type with the inhabitants of our border districts, and are quite distinct from the hardy and warlike races of the Nepal hills, the Khas, Mangar, Gurung and other tribes, collectively known as Gorkhas,† who are in such demand for certain native regiments and for the various Military Police battalions. The total number of 'Gorkhas' serving in the native army as soldiers on the 1st January 1901 was 12,797, and the number employed in the Military Police, and as porters and the like may be estimated at about 6,000 more.‡ The total thus comes to about 19,000, but this does not indicate the full extent to which recruitment for these services has augmented the number found in British territory. On the expiry of their period of service many of them settle permanently, especially in Assam, where they often

* The exact number cannot be given, as it is impossible to say how many of the military garrison were born within the limits of Great Britain and Ireland.

† An explanation of the signification of this and other terms used in connection with the inhabitants of Nepal will be found in the Bengal report, page 452.

‡ The number of Nepalese, including Limbus and Bais, in the Burma and Assam Military Police battalions on the 1st January 1901, was 2,919 and 2,150 respectively.

become herdsmen, wood-cutters, or cultivators. The total number of the Nepal-born is slightly greater than in 1891, they are nearly twice as numerous in Assam and Burma as they were then, and there is a fair increase in the United Provinces; but on the other hand there is a decline of about 12,000 in Bengal. The immigrants from Afghanistan and the adjacent trans-frontier tracts number only 115,908 at the present census compared with 159,634 in 1891. The diminution is caused by a decrease from 137,214 to 89,128 in the figures for the Punjab, where the movement to Peshawar, Hazara and several other frontier districts from across the border is weaker than it was ten years ago. Many of the older immigrants have died, and have been replaced, not by fresh immigrants, but by their children born in British territory. Elsewhere, the number of Afghans is steadily growing, but this is not altogether a matter for congratulation. They are in many cases itinerant traders whose methods are not very peaceable, and where the villagers are timid, as in most parts of Bengal, they are addicted to leaving articles with them, or more often with their wives, on approval, and subsequently returning and insisting on payment at their own valuation.

Causes inducing migration to a distance

191. In conclusion we may glance at a few of the more general aspects of migration to a distance. In Burma and Bengal proper, especially in the former province, the people are prosperous and there is no class of landless labourers. The demand for such labourers is met, in the latter case, by immigration from Bihar and the United Provinces and, in the former, by a similar influx from Madras*. Elsewhere movement to a distance is encouraged mainly by undertakings founded with European capital. The tea gardens of Assam, Jalpaiguri and the Dajeeching terai depend for their labour supply chiefly on the aborigines of Chota Nagpur and the neighbouring hilly tracts, and those of Ceylon on the Tamils of the southern part of the Madras Presidency, which also furnishes the bulk of the miners required for the Mysore gold fields and for the rice mills of Rangoon. The cotton mills of Bombay are manned to a great extent by local labour from the adjoining districts, but considerable numbers find their way thither from the United Provinces, which, with Bihar, is also the main source of supply for the jute mills and other industrial undertakings in Calcutta and its environs. The coal mines of West Bengal compete with the tea gardens for the 'jungly' coolies of Chota Nagpur but, the supply being insufficient, they are fain to eke it out with plains people from Upper India.

It will have been noticed that, except in the case of the tea gardens of Assam and North Bengal, for which a special class of labour is required, the direction of these movements depends primarily on the means of communication, and the people go most readily to the industrial centres which are easiest of access. This tendency is more fully brought out in the Bengal report, where it is shown that the labourers of South Bihar go mainly to West and Central Bengal while those of North Bihar, except Saran which enjoys better means of communication with the tracts just mentioned, find their way more freely to North Bengal. The recent opening of railway communication has encouraged a considerable flow of population from Rajputana to the irrigated districts of Sind, and it may be anticipated that the completion of the hill section of the Assam Bengal Railway and of the line between Gauhati and Dhubri, which will link up that railway with the Bengal-Bihar system, will in time lead to the exploitation of the waste lands of the Assam Valley by immigrants from Sylhet and the Bihar districts. The Bengal Nagpur and East Coast Railways should similarly open the Central Provinces, Orissa and Madras labour markets to the employers of labour in the mills and mines of Bengal proper.

The insufficiency of the existing labour supply

192. In spite of the great and growing volume of migration, and of the marked improvement in communications which has taken place in recent years, the complaint is universal that the existing supply of labour is wholly insufficient, and that its growing scarcity and dearness† constitute a serious drag on

* There is also an extensive movement from the south of Chittagong to Akyab at the time of the rice harvest, but this scarcely falls within the scope of the present discussion, which deals with emigration to a distance.

† At certain seasons an unskilled labourer in Calcutta can earn a rupee a day by carrying coal, and the ordinary rate is from 8 to 10 annas a day for men and 5 to 6 annas for women. It is said that labour is becoming scarce everywhere and quite recently good unskilled labourers in the Calcutta docks were earning Re 1-8-0 a day. This rate was of course only paid during a time of special pressure but it shows how slowly under existing conditions the supply of labour adapts itself to the demand for it. Good weavers in the jute mills are paid as much as Re 6 a week and ordinary ones get Re 3-8. Further particulars regarding wages will be found at pages 8 and 99 of the Report of the Labour Enquiry Commission, 1896.

the wheels of industrial progress. This is due partly to the rate at which the demand is growing. The supply is steadily increasing but the demand is doing so at an even more rapid pace. In the case of Calcutta and Bombay, moreover, it is probable that the presence of plague deters many, who would otherwise do so, from coming to these great centres of industry. The main reason, however, seems to be partly that the existing areas of supply are inadequate to the demands which are made on them and partly that, except for the tea gardens, no steps are taken by employers to exploit new areas or to assist intending immigrants. In respect of the tea industry the difficulty is that the class of labour suitable for the work and climate is limited, but it is not so in the case of other industries, for which it is probable that an ample supply would be readily obtainable if proper steps were taken to obtain it.* As stated above, there is in their case no organized system for encouraging immigration and without such an organization the growth of new currents of migration must necessarily be slow and tedious, while there must be many of the poorer class, even in the existing areas of supply, who do not seek employment elsewhere simply because they have not the means of defraying the cost of the journey. There is also no combination amongst the employers, and the result is that if any individual were to expend money in importing labour from a distance, he would have no guarantee that it would not at once drift elsewhere.

193 If the difficulties now experienced are to be overcome, the first step needed seems to be the conclusion of some arrangement amongst employers whereby each may be guaranteed against the employment by the others of coolies imported by him for a period sufficiently long to enable him to recoup the costs of importation,† coupled with the establishment at their joint cost of local agencies, where information may be disseminated amongst the labouring classes as to the employment and rates of wages offered in the different industrial undertakings, and railway tickets supplied to those willing to execute an agreement to labour for a given period‡. The only classes who would emigrate, at least until the practice had become well established in any locality, are those who are unable to earn a sufficient livelihood in their own village, and the transfer of such persons to a place where ample wages are obtainable would be a benefit alike to themselves and to the industrial community. If, therefore, such an organization were established there would seem to be no reason why it should not be supplied by the local officers of Government with full information as to the places where the pressure of the population is severe.

Suggestions
for
meeting the
difficulty

* The labourers who now come from the United Provinces have their homes almost exclusively in a few of the eastern districts. The rest of this densely populated tract at present supplies very few emigrants to Calcutta. The Central Provinces and the Native States of Central India and Rajputana, though the population is sparse, have a large proportion of landless labourers who would benefit greatly by going to Calcutta, and the Madras labour supply is also in all probability considerable.

† The practical working of such an arrangement would no doubt present difficulties, owing to the enormous number of coolies employed, but they do not seem to be insuperable. If there were a genuine desire for co-operation (and there is such co-operation in most districts amongst tea planters) they could apparently be met by the registration of the thumb impressions of all newly-imported labourers at a central bureau, coupled with the taking of the thumb impressions of all labourers locally engaged, which would also be sent to the bureau. It could thus be ascertained if any labourer registered as imported from a distance had been given employment elsewhere within the period for which it might be arranged that other employers should not engage him.

‡ Such agreements would be enforceable under section 492 of the Indian Penal Code.

SUBSIDIARY TABLE I

Variation in relation to density since 1872.

PROVINCE, STATE OR AGENCY	Percentage of variation Increase (+) or Decrease (-)			Net variation in period 1872-1901 Increase (+) Decrease (-)	Mean density of population per square mile			
	1891 1901	1891 1901	1872-1891		1901	1891	1881	1872
INDIA.	+2'4	+13'1	+23'1	+42'7	167	163	144	117
Excluding new areas	+1'5	+10'9	+6'8	+21'7				
Provinces.	+4'8	+11'1	+7'5	+25'2	213	203	183	170
Excluding new areas	+1'9	+9'7	+7'3	+21'1				
Ajmer-Merwara	-12'0	+17'7	+16'2	+20'3	176	200	170	146
Assam	+5'9	+10'7	+18'2	+38'7	109	103	105	91
Bengal	+4'7	+6'8	+10'9	+24'2	494	472	441	398
Berar	-4'9	+8'4	+20'0	+23'6	155	164	151	126
Bombay	-1'6	+14'4	+1'1	+13'8	151	153	134	132
Burma	+35'8	+100'6	+36'0	+281'8	44	33	16	12
Central Provinces	-8'4	+9'6	+20'4	+20'8	114	124	114	94
Coorg	+4'4	-2'9	+5'9	+7'3	114	109	118	106
Madras	+7'2	+15'5	-1'2	+22'3	270	251	217	220
North-West Frontier Province and Punjab	+7'6	+10'7	+7'0	+27'5	198	184	166	155
United Provinces of Agra and Oudh	+1'7	+6'2	+5'1	+13'5	445	438	412	392
States and Agencies.	-5'4	+20'5	+160'9	+197'4	92	97	81	31
Excluding new areas	-6'6	+20'1	+1'6	+27'6				
Banoda State	-19'1	+10'7	+9'2	-2'2	241	298	269	247
Bengal States	+12'6	+19'4	+28'1	+72'7	97	86	72	56
Bombay States	-1'4	+16'5	+2	+1'6	105	123	106	103
Central India Agency	-16'4	+11'4			110	131	118	
Central Provinces States	-7'6	+26'4	+62'9	+90'2	68	73	58	36
Hyderabad State	-3'4	+17'1			135	140	119	
Kashmir State	+14'2				36	31	...	
Madras States	+13'1	+10'6	+1'6	+27'3	420	371	336	330
Cochin State	+12'3	+20'4	-1	+35'0	596	531	441	441
Travancore State	+15'4	+6'5	+3'8	+27'7	416	361	339	326
Mysore State	+12'0	+18'1	-17'2	+9'6	188	168	142	172
Punjab States	+3'3	+10'4			121	117	106	
Rajputana Agency	-18'9	+20'7			76	94	78	
United Province States	+1'2	+6'8	+16'1	+25'5	158	156	146	126

NOTE -- The figures against Burma in cols. 3 and 5 include the population of Upper Burma proportions are -- in 1891 1901 +22'6 in 1881 1891 +23'5, in 1872 81, +37'7, in 1872 1901, +108'0 Lower Burma alone the

SUBSIDIARY TABLE II.

Net variation since 1801.

PROVINCE, STATE OR AGENCY.	Population in		Gross • variation — Increase (+) Decrease (—)	Excess of Immigrants (+) or Emigrants (—) in 1901	Excess of Immigrants (+) or Emigrants (—) in 1891	Net variation after allowing for migration	Percentage of net vari- ation
	1801	1901					
1.	2	3	4	5	6	7	8
Ajmer-Merwara	542,358	476,912	—65,446	+66,686	+51,598	—80,539	—15
Andaman	15,609	24,649	+9,040	+13,569	+13,289	+8,760	+56
Assam	5,477,303	6,126,343	+649,041	+699,182	+446,009	+395,868	+7
Bengal (including States) . . .	74,673,798	78,493,410	+3,819,612	—143,563	—269,791	+3,693,384	+5
Berar	2,897,491	2,754,016	—143,475	+849,443	+335,040	—157,878	+5
Bombay (including States) . . .	26,960,421	25,468,209	—1,492,212	+91,396	+184,815	—1,398,793	+5
Burma	7,722,053	10,490,624	+2,768,571	+405,176	+272,124	+2,635,819	+34
Central Provinces (including States)	12,944,805	11,873,029	—1,071,776	—26,761	+47,821	—997,194	—8
Coorg	173,055	180,607	+7,552	+51,745	+50,063	+5,875	+3
Madras (including States) . . .	39,331,062	42,397,522	+3,066,460	—402,174	—265,016	+3,203,618	+8
North-West Frontier Province and Punjab (including States) . . .	25,130,127	26,880,217	+1,750,090	+181,435	+141,409	+1,713,064	+7
United Provinces (including States).	47,697,282	48,493,879	+796,597	—894,957	—631,748	+1,056,806	+2
Baroda State	2,415,396	1,952,692	—462,704	—30,546	+58,780	—373,378	—15
Central India Agency	10,318,812	8,628,781	—1,690,031	+202,638	+166,347	—1,726,322	—17
Hyderabad State	11,537,040	11,141,142	—395,898	—6,578	—14,600	—403,920	—4
Kashmir State	2,543,952	2,905,578	+361,626	—3,547	—23,777	+341,396	+13
Mysore State	4,943,604	5,539,399	+595,795	+171,116	+48,827	+473,506	+9
Rajputana Agency	11,990,504	9,723,301	—2,267,203	—666,635	—493,684	—2,097,252	—18

SUBSIDIARY TABLE III

Variation since 1891 in the main natural divisions of India.

NATURAL DIVISIONS	POPULATION		VARIATION	
	1901	1891	Actual	Per cent
1	2	3	4	5
Himalaya and Sub-Himalaya West	17,339,782	16,784,728	+555,054	+3.3
Himalaya and Sub-Himalaya East	36,193,928	35,590,990	+602,938	+1.7
Indo-Gangetic Plain West	30,069,771	28,488,921	+1,580,850	+5.5
Indo-Gangetic Plain East	19,676,126	20,119,023	-442,897	-2.2
Delta of Bengal	35,821,824	33,243,726	+2,578,098	+7.8
Brahmaputra Valley	3,062,003	2,892,592	+169,411	+5.9
North-West Dry Area	13,563,310	12,898,516	+664,800	+5.1
Central India Plateau	16,053,539	19,188,483	-3,134,944	-16.3
West Satpuras Division	6,461,884	6,620,449	-158,565	-2.4
East Satpura Division	16,759,028	17,556,977	-797,949	-4.5
Deccan	23,441,579	23,932,993	-491,414	-2.1
Gujarat	9,108,799	11,180,226	-2,071,437	-18.5
West Coast Division	12,125,619	11,381,335	+744,284	+6.1
South India	16,773,659	15,281,143	+1,492,516	+9.5
East Coast South Division	10,121,090	9,624,631	+496,459	+5.2
East Coast North Division	16,041,949	14,704,566	+1,337,383	+9.1
Baluchistan	810,746		+810,746	
Burma Coast Division	3,860,038	3,036,217	+823,821	+27.1
Burma Wet Division	3,942,549	1,995,147	+1,947,402	+97.6
Burma Dry Area	3,054,936	2,734,323	+320,613	+11.7
Total	294,282,159	287,254,983	+7,027,176	+2.4

NOTE — The Andamans and Laccadive Islands and Aden which do not fall within the scheme of Natural Divisions given in the last chapter have been left out of account in this table. The unenumerated portion of Baluchistan has also been omitted.

SUBSIDIARY TABLE V.

Variation distributed by areas of increase and decrease.

PROVINCE, STATE OR AGENCY.	AREAS SHOWING AN INCREASE				AREAS SHOWING A DECREASE			
	Area	Population		Increase per cent.	Area	Population		Decrease per cent.
		1901	1901			1901	1901	
1	2	3	4	5	6	7	8	9
INDIA.	943,016	193,790,645	178,408,740	+ 8.6	606,973	97,886,087	108,945,185	-10.1
Provinces.	686,850	166,064,010	153,463,117	+ 8.2	273,075	63,722,687	67,616,271	- 5.7
Ajmer Merwara	...	...	...		2,711	476,912	542,358	-12.0
Andamans	3,143	16,256	15,609	+4.1	..	...	...
Assam	38,031	4,909,097	4,452,112	+10.2	7,701	650,347	981,556	-13.3
Bengal	125,919	61,203,331	57,216,684	+6.9	25,266	13,535,535	14,180,277	-4.2
Petlar	2,678	582,540	571,964	+1.3	15,032	2,171,476	2,322,527	-6.5
Bombay	61,742	6,552,191	6,073,568	+7.8	61,322	12,007,370	12,804,751	-6.2
Burma	158,791	8,164,365	6,611,367	+23.4	9,782	972,017	994,193	-2.2
Central Provinces	13,503	1,564,660	1,499,851	+5.0	72,951	8,311,986	9,291,443	-10.5
Cooch	1,582	180,607	173,035	+4.3	...	..	...
Madras	129,083	37,349,174	34,770,659	+7.4	12,622	850,888	859,781	-1.0
North-West Frontier and Punjab	88,539	16,361,311	14,667,709	+11.5	22,358	6,016,752	6,199,188	-2.9
United Provinces	63,834	29,162,478	27,417,544	+6.3	48,330	18,529,304	19,487,247	-4.9
States and Agencies	256,166	27,736,635	24,945,023	+11.1	333,898	34,163,400	41,328,914	-17.3
Baroda State	...	...	...	...	8,099	1,952,692	2,415,396	-19.1
Bengal States	34,527	3,122,556	2,717,511	+14.9	1,807	566,974	578,868	-2.0
Bombay States	7,868	602,952	496,989	+21.5	57,893	6,305,696	7,586,018	-16.8
Central India Agency	..	..	..	..	78,772	8,628,781	10,818,812	-16.4
Central Provinces States	9,481	779,260	701,901	+11.0	19,954	1,217,123	1,458,610	-16.5
Hyderabad State	39,819	5,297,453	4,829,569	+9.7	42,879	5,843,689	6,707,471	-12.4
Kashmir State	60,900	2,905,578	2,513,952	+14.2	...	..	...
Madras States	9,553	4,111,622	3,633,738	+13.4	416	43,464	46,884	-7.3
Mysore State	29,413	6,812,242	4,689,190	+13.2	31	227,157	254,414	-10.7
Punjab States	36,042	4,317,814	4,148,058	+4.0	490	108,584	115,222	-7.5
Rajputana Agency	1,383	985,273	924,373	+6.5	123,158	8,738,028	11,395,970	-22.6
United Provinces States	4,150	268,885	241,242	+11.4	899	533,212	551,240	-3.2

Includes Cochin and Travancore

NOTE.—In this table the areas enumerated for the first time in 1901 have been left out of account.

SUBSIDIARY TABLE VI.

Comparison of actual and estimated population in certain tracts.

PROVINCE OR STATE	Actual population by census of 1891	Population estimated from increase 1891-91	Population in 1901 estimated from vital statistics	Actual population by census 1901
1	2	3	4	5
Assam	4,971,917	5,503,913	4,846,572	5,275,706
Bengal	71,069,617	75,973,417	71,228,517	74,428,193
Berar	2,852,825	3,092,462	2,702,022	2,717,346
Bombay	18,820,346	21,530,471	18,578,799	18,481,362
Central Provinces	9,501,401	10,413,536	9,121,221	8,669,371
Madras	33,693,179	38,949,309	36,078,482	37,315,611
North-West Frontier Province and Punjab	20,552,847	22,752,000	21,940,255	22,048,908
United Provinces	46,904,791	49,812,880	49,287,074	47,691,782
Baroda State	2,415,396	2,673,844	2,136,231	1,952,692
Total	210,782,319	230,701,835	218,919,476	218,620,971

NOTE.—The figures in columns 2 and 5 show the population of the areas for which vital statistics were recorded in 1891 and 1901.

SUBSIDIARY TABLE VII.

Showing for each Province and State the number per 10,000 of the population who were born in the district or state where enumerated and who were immigrants.

PROVINCE, STATE OR AGENCY	NUMBER PER 10,000 OF POPULATION	
	Born in district where enumerated	Immigrants
1	2	3
INDIA.	9,050	950
Ajmer-Merwara	7,926	2,074
Assam	8,520	1,480
Bengal	9,423	577
Berar	7,649	2,351
Bombay *	8,916	1,084
Burma	8,661	1,339
Central Provinces	8,819	1,181
Cooch	6,949	3,051
Madras †	9,575	425
United Provinces	9,058	942
Punjab and N-W Frontier Province	8,183	1,817
Baroda State	9,054	946
Central India Agency	7,245	2,755
Cochin State	9,381	616
Hyderabad State	9,068	932
Kashmir State	9,493	507
Mysore State	8,979	1,021
Rajputana Agency	9,417	583
Travancore State	9,814	186

* Excluding Aden
† " " Lakshadweep

SUBSIDIARY

Migration between Provinces

PROVINCE OR STATE

BRITISH TERRITORY

PROVINCE OR STATE IN WHICH BORN		Bengal	United Pro- vinces of Agra and Oudh	Bombay	Madras	Punjab and North West Frontier Province	Burma	Central Provinces	Assam	Other Provinces
1		2	3	4	5	6	7	8	9	10.
10111	1901	915,168	680,091	840,781	261,963	795,267	475,328	460,694	775,842	642,500
	1891	777,360	799,137	1,017,814	269,030	740,750	323,170	532,366	510,672	675,336
Ajmer Merwara	1901	461	2,398	466	35	754	31	710	191	193
	1891	60		1,961	61	659	4	732		20
Andamans	1901	81	21		38	130	36	21		3
	1891	16	73	3	72	130	12	23		5
Assam	1901	48,296	840	55	164	103	1,654	191		154
	1891	53,623	1,790	108	80	175	752	16		79
Baluchistan	1901	38	148	65,684	31	4,059	8	64	655	195
	1891	8	47	55,599	55	984	4	57		63
Bengal	1901	..	124,991	6,471	10,375	7,071	157,031	44,366	508,850	3,306
	1891		206,026	12,407	10,934	7,730	112,084	55,741	418,341	4,634
Bihar	1901	89	388	4,144	61	35	5	59,888	54	109
	1891	123	392	18,162	69	61		52,110		3
Bombay	1901	6,708	6,102		29,396	11,959	6,663	31,322	1,415	82,725
	1891	6,476	7,148		37,534	8,692	3,491	21,671	311	66,695
Burma	1901	1,664	794	302	1,535	802		315	1,666	2,029
	1891	2,332	1,626	531	2,004	126		374	67	723
Central Provinces	1901	62,181	10,857	12,532	14,127	1,356	2,128	..	84,170	209,096
	1891	90,997	12,179	10,615	16,253	1,228	527	..	3,811	217,269
Coorg	1901	5	1		632	1	..			
	1891	152		21	655	31		6		
Madras	1901	27,649	1,606	32,362		937	189,810	21,763	21,571	31,728
	1891	24,344	1,724	39,938		1,009	129,145	26,795	10,651	30,020
Punjab and N. W. I.	1901	17,442	132,740	44,070	1,355		21,585	6,215	6,265	28,842
	1891	15,914	143,326	41,602	1,126		11,878	6,541	836	18,052
United Provinces	1901	496,940		69,030	3,926	242,724	33,760	94,983	108,900	46,226
	1891	365,218		87,356	4,174	248,708	18,233	123,009	57,851	51,326
Baroda State	1901	134	830	195,675	304	105	1	68		83
	1891	96		246,911	224		..	131		3
Central India Agency	1901	23,116	199,388	11,583	670	3,692	210	148,618	12,168	5,716
	1891	3057	225,517	24,968	852	3,221	78	192,383	1	7,368
Hyderabad State	1901	662	2,233	123,577	62,430	849	600	19,408	151	95,329
	1891	680	1,933	186,945	57,992	1,101	140	21,885	23	111,519
Kashmir State	1901	325	1,101	666	33	83,240	68	57	68	476
	1891	123	2,213	536	14	87,545	17	29	28	300
Mysore State	1901	621	167	13,173	89,743	205	452	785	170	24,931
	1891	155	163	15,186	94,211	126	6	832	..	25,211
Rajputana Agency	1901	40,672	126,739	132,105	1,546	268,761	553	26,668	9,336	101,310
	1891	16,962	128,232	115,777	1,163	208,652	742	22,042	4,877	109,512
India Unspecified	1901		99	7,490	309	3,928	799	43	146	1,278
	1891	1,970		4,144	1,604	516	1,329	569	6	282
French and Portuguese Possessions	1901	1,702	98	44,484	2,611	161	500	641	2	458
	1891	109	53	51,548	23,733		123	394	20	47
Outside India	1901	186,168	65,156	70,712	24,642	174,392	59,393	4,563	25,031	8,309
	1891	194,155	63,694	67,858	15,850	170,100	42,456	3,926	13,805	6,145

TABLE VIII.

and States in 1891 and 1901.

IN WHICH ENUMERATED

Total	NATIVE STATES AND AGENCIES							GRAND TOTAL	PROVINCE OR STATE IN WHICH ENUMERATED
	Baroda	Central India Agency	Hyderabad	Kashmir	Mysore	Rajputana	Total		
11	12	13	14	15	16	17	18	19	20
5,848,224	172,914	672,263	325,197	85,597	308,263	234,407	1,796,841	7,644,865	1901 } TOT II
5,622,641	311,793	752,613	383,713	69,237	195,798	407,383	2,120,186	7,743,127	1891 }
5,277	60	1,266	83	10	11	18,586	20,016	25,293	1901 } Ajmer-Merwara
3,197	334	2,757	.	.	6	49,963	53,060	56,557	1891 }
333	..	..	.	1	14	1	16	349	1901 } Andamans
98	...	.	3	.	9	.	12	410	1891 }
51,461	6	.	.	2	4	8	20	51,481	1901 } Assam
56,373	4	39	3	.	8	60	114	56,687	1891 }
70,580	12	.	13	16	8	57	106	70,986	1901 } Baluchistan
9,817	11	21	11	9	3	1	78	59,695	1891 }
861,197	915	5,039	1,602	198	416	884	9,054	870,551	1901 } Bengal
827,900	613	18,476	1,231	111	553	4,105	23,088	852,968	1891 }
11,768	17	10	23,084	.	9	9	23,129	87,897	1901 } Berar
70,990	90	.	13,813	.	.	.	43,931	114,854	1891 }
176,296	161,153	75,393	167,619	202	37,117	9,019	150,503	626,799	1901 } Bombay
1,01,923	290,384	60,208	159,728	34	21,159	20,105	551,618	706,542	1891 }
9,107	25	.	114	3	181	27	353	9,460	1901 } Burma
7,806	39	33	134	1	26	3	439	8,295	1891 }
996,117	121	66,968	16,787	8	1,532	362	85,781	482,228	1901 } Central Province
55,912	459	117,869	6,783	1	2,015	527	127,653	480,065	1891 }
619	...	..	.	.	2,553	..	2,553	3,192	1901 } Coorg
800	4	.	12	.	1,771	.	1,787	2,662	1891 }
127,126	208	1,026	55,369	9	255,278	179	312,069	639,495	1901 } Madras
2,109	335	1,180	91,192	16	160,936	555	254,491	518,523	1891 }
2,8511	818	11,664	2,429	81,158	365	77,103	176,837	435,851	1901 } Punjab and N W F
21,535	1,192	12,676	3,944	66,106	126	97,778	181,722	425,257	1891 }
1,086,189	3,200	320,159	21,800	751	723	74,583	423,806	1,510,295	1901 } United Provinces
958,905	7,620	289,513	12,667	875	110	99,921	111,339	1,370,144	1891 }
197,195	.	4,452	156	6	168	325	5,107	202,302	1901 } Baroda
217,565	.	4,337	72	.	92	510	5,031	252,396	1891 }
405,191	819	...	4,347	20	51	51,873	57,119	462,310	1901 } Central India Agency
461,140	1,730	.	1,064	1	70	117,801	120,716	581,856	1891 }
311,239	203	2,627	.	18	3,552	131	6,551	317,790	1901 } Hyderabad State
382,251	289	1,028	.	.	3,963	119	5,729	387,983	1891 }
86,033	15	8	1	.	11	89	124	86,157	1901 } Kashmir State
90,805	.	55	58	.	4	5	122	90,927	1891 }
130,247	22	.	1,360	.	.	53	1,135	131,682	1901 } Mysore State
158,919	47	12	4,553	.	.	.	4,614	113,533	1891 }
707,890	4,189	173,356	13,858	119	802	.	192,334	900,221	1901 } Rajputana Agency
635,089	7,157	237,581	19,044	2	244	.	264,028	899,617	1891 }
13,992	554	3,259	1,081	3	216	30	5,146	19,138	1901 } India Unspecified
10,115	.	2,194	28,914	..	129	13,118	15,380	55,798	1891 }
68,637	288	318	18	10	661	99	1,394	70,081	1901 } French and Portuguese Possessions
76,026	679	28	106	.	610	.	1,420	77,146	1891 }
618,666	316	3,738	12,883	2,974	2,588	728	23,188	641,854	1901 } Outside India
577,989	530	4,389	10,299	2,098	3,436	1,448	22,200	660,192	1891 }

SUBSIDIARY

Variation compared with 1891 in the number of immigrants

PROVINCE OR STATE	CONTIGUOUS COUNTRIES				DISTANT					
	NEPAL		AFGHANISTAN AND YAGHISTAN		BRITISH ISLANDS.					
					1901			1891		
	1901	1891	1901	1891	Total	Males	Females	Total.	Males	Females
INDIA.	243,037	236,527	115,908	160,580	96,653	81,990	14,663	100,775	86,116	12,358
Provinces.	241,452	235,086	112,977	155,261	84,933	72,222	12,711	90,909	77,465	11,173
Ajmer-Merwara	9	12	120	71	576	474	102	401	303	98
Andamans	9		32		190	177	13	76	(a)	(a)
Assam	21,347	11,377	1,101	319	1,287	1,080	207	831	681	150
Baluchistan	6	14	3,525	1,618	2,820	2,636	184	2,195	(a)	(a)
Bengal	161,495	173,228	4,363	3,455	11,886	9,290	2,596	9,792	7,709	2,083
Berar	13	11	424	803	93	51	39	91	65	29
Bombay	213	300	12,513	9,525	15,753	13,275	2,478	20,723	18,226	2,502
Burma	8,910	2,146	253	92	5,690	5,057	633	7,086	6,332	754
Central Provinces	74	207	415	521	3,444	2,232	1,212	2,861	2,563	298
Coorg	3		2	19	99	62	37	110	82	28
Madras	77	55	100	236	5,994	4,874	1,120	5,461	4,347	1,114
Punjab	7,711	6,476	89,128	137,214	21,690	19,471	2,219	23,529	21,329	2,200
United Provinces	46,585	41,197	1,001	1,352	15,111	13,540	1,871	17,745	15,828	1,917
States and Agencies	1,585	1,141	2,931	5,319	11,720	9,768	1,952	9,866	8,661	1,185
Baroda State	11	53	165	177	22	12	10	52	36	16
Central India Agency	73	110	186	798	3,255	2,767	488	3,051	2,778	273
Hyderabad State	25	56	886	1,442	5,728	4,929	799	3,432	3,128	304
Kashmir State	1,381	1,001	3,347	1,928	92	45	47	59	31	28
Cochin State	10	13	2		26	16	10	11	5	3
Travancor State	15	2	26	9	242	168	74	104	63	41
Mysore State	5	3	21	33	2,100	1,661	439	2,912	2,477	435
Rajputana Agency	56	173	308	912	255	170	85	245	160	85

Note.—For slight difference between the totals for 1891 given in this table and those in Subsidiary Table X is due to the fact that the detailed figures here take (a) Details by sex not available

TABLE IX.

from certain foreign countries to each Province and State:

COUNTRIES											
GERMANY		FRANCE		OTHER EUROPEAN COUNTRIES		AMERICA		AFRICA		AUSTRALIA	
1901	1891	1901	1891	1901	1891	1901	1891	1901	1891	1901	1891
12	13	14	15	16	17	18	19	20	21	22	23
1,696	1,453	1,351	1,258	4,883	4,416	2,069	2,367	8,293	11,569	616	504
1,608	1,405	1,223	1,183	4,570	3,925	1,992	2,232	8,193	11,351	610	474
2	4	8	10	7	9	5	5	3	5	7	1
1	..	..	..	1	..	3	3	1	..	..	..
22	18	5	5	26	12	49	30	15	4	20	6
2	5	23	12	11	28	9	27	15	3	5	14
350	349	253	298	837	1,012	370	319	170	156	195	122
2	4	22	13	13	5	24	7	..	3	2	..
658	338	210	151	2,172	1,269	340	341	7,007	9,663	10	72
140	307	17	127	363	515	211	266	58	48	48	31
19	16	70	51	113	49	69	48	17	16	14	21
10	5	2	7	2	3	2	..	2	2	..	1
239	217	385	421	363	383	212	192	672	954	92	77
71	66	43	48	119	177	273	227	87	142	92	67
71	91	16	37	213	263	125	767	146	355	125	62
88	48	128	75	313	491	77	135	100	218	36	30
1	4	5	..	5	17	2	10	23	81	..	..
3	..	15	..	95	170	12	34	13	14	8	5
23	22	12	12	66	52	19	54	16	99	..	7
..	3	6	3	12	6	2	..	8	2	2	..
2	..	2	6	3	6	2	..	2	..	..	..
11	3	11	2	28	41	4	9	4	2	4	..
41	12	72	48	90	189	27	23	18	17	16	15
1	4	5	4	14	10	9	15	16	3	6	3

are those shown in the Provincial Census Reports for that year which differ in some cases from those in the General Report, where the sexes are not shown separately.

SUBSIDIARY TABLE X.

Total number of immigrants from outside India at each of the last three censuses.

PLACE OF BIRTH	NUMBER RETURNED IN		
	1901	1891	1881
1	2	3	4
GRAND TOTAL	641,854	600,192	408,572
Asia.	526,149	477,730	307,198
Afghanistan and Yughistan	115,908	159,631	125,106
Turkistan	816	816	259
Tibet	3,020	1,641	2,756
Bhotan	2,660	4,333	4,964
Nepal	243,037	236,398	134,342
Ceylon	5,273	5,612	2,770
Further India, etc	16,371	8,857	4,697
Arabia, etc	33,031	28,092	18,875
Persia	11,660	4,411	3,501
China and Japan	17,184	25,688	12,760
Other Asiatic countries	17,190	2,228	2,108
Europe.	101,583	107,772	95,415
United Kingdom	96,653	100,551	89,015
Gibraltar, etc	227	304	131
Germany	1,696	1,458	1,170
France	1,351	1,258	1,013
Italy	1,010	881	788
Austria	531	418	296
Sweden, Norway, Denmark, and Iceland	123	542	829
Holland and Belgium	711	337	259
Spain and Portugal	384	378	234
Greece	226	236	195
Russia	525	262	204
Turkey	201	256	355
Europe unspecified	460	633	773
Other European countries	155	258	153
Africa	8,293	11,568	3,861
America and Canada	2,069	2,368	1,555
Australia	646	506	367
At sea	114	248	176

CHAPTER

Sex.

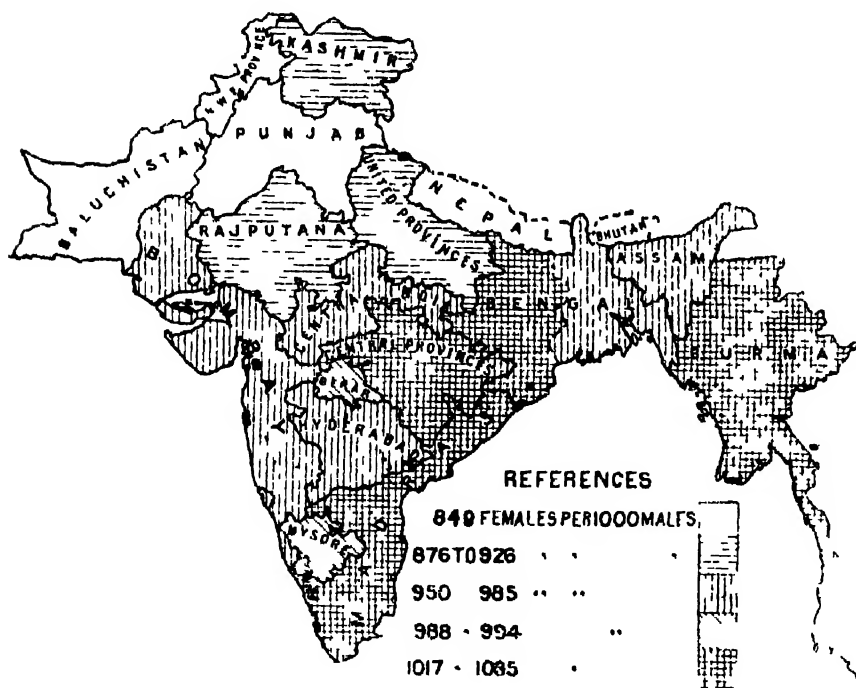
194. With very few exceptions, the females outnumber the males in all European countries, but in India the reverse is the case, and in the whole country taken together there are only 963 females to 1,000 males. The general result is shared by all provinces and states except the Central Provinces and Madras, where there is a marked excess of females, and Bengal where the two sexes are almost on a par. In the last-mentioned province females are in marked defect in the greater part of Bengal proper, and in excess throughout Bihar, Orissa and Chota Nagpur. The deficiency of females is extraordinarily great in Coorg, Baluchistan, the Punjab and Kashmir, where it exceeds 1 in 9, and is almost as marked in Ajmer and the Rajputana Agency. Then follow the Baroda State, the United Provinces, Bombay and Central India, then Assam, Burma and Hyderabad. It will be noticed that the dearth of women is greatest in the north-west of India, and gradually becomes less noticeable towards the east and south, where it is eventually replaced by a deficiency of males. Women are also in a clear minority in the extreme east—in North Bengal, Assam and Burma.

General proportion of the sexes in natural population

195. The above observations refer to the actual population, or the persons

In natural population

Map shows the proportions of the sexes in the natural population of each Province and State



enumerated in each tract, irrespective of the place where they were born. In order to ascertain the proportions amongst the natural population, i.e., the persons born in each tract, we must discount the effect of migration by deducting the persons who have come in from outside and adding those born in it, who have gone elsewhere. In India, as a whole, migration does not greatly disturb the sex proportions, but it is a factor of considerable importance when we descend to the figures for individual provinces and states.

NOTE—For the purpose of this map Bengal proper has been separated from the rest of the Lower Provinces. The lowest proportion refers only to the Punjab and N.W.F. Province. The return for Baluchistan is incomplete and it has therefore been left out of account.

Its influence is most marked in the case of Burma, where the proportion of females to males amongst persons born in the province is 1,027 per mille, compared with only 962 in the actual population, which includes numerous immigrants, chiefly males, from Bengal and Madras. Similarly in Assam the proportion in the natural population rises from 949 to 973, in Coorg from 801 to 963 and in Mysore from 980 to 994. In the United Provinces, on the other hand, it falls from 937 to 926, in the Punjab from 852 to 849, and in Madras from 1,025 to 1,017.*

* This is exclusive of Ceylon. The statistics for that island do not distinguish persons born in Madras from those born in other parts of India, but the great majority of the natives of India enumerated there must have come from Madras. The total of the Indian-born includes 402,793 Tamils (males 239,888, females 162,905) and 27,475 'Moors' or Mussalmans. If all those shown as Tamils are treated as natives of Madras, the proportion of females to 1,000 males in that Presidency falls to 1,014. Similarly there were 37,900 male and 13,900 female Tamils in the Straits Settlements and if these also are assumed to be Madras-born, together with 19,474 males and 9,076 females who have emigrated from Madras to Mauritius, the proportion in question is further reduced to 1,011.

The general distribution, however, is much the same as before, save that the area in Eastern India where females are in marked defect is limited to parts of Bengal proper and Assam, and Burma is transferred to the category of areas where their number exceeds that of the other sex.

Proportion
in Bengal

196. Migration has a still more disturbing effect on the proportions when the figures come to be considered for smaller units, such as districts. In the actual population of Howrah (Bengal), for example, there are only 935 females per 1,000 males, while in the natural population the proportion rises to 1,050. It is necessary to bear this in mind when dealing with the variations in different parts of a province. In Bengal practically the whole country west of the Bhágirathi, where the Dravidian element is strongest, shows an excess of females, while to the east of that river, males preponderate almost everywhere. It appears at first sight that there are fewer women amongst the Muhammadans than amongst the Hindus, but this is due to the fact that the bulk of the Muhammadans are found in the tract where women generally are in a minority, and if the comparison be made for each natural division separately, it will be seen that the followers of the Prophet have a slightly larger proportion of females than the Hindus. The higher castes of Hindus have usually fewer women than those of lower status, but the lowest proportion of all is found amongst the Mongoloid castes and tribes. In the case of Bihar castes, the Ahirs and Pásis are noticeable for the paucity of their women.

United
Provinces

197. In the United Provinces, excluding the Himalayan district of Garhwal, Mr. Burn notices a regular rise in the proportion of females from the north-west to the south-east, until, in the districts which adjoin Bihar, the females outnumber the males, but as the tracts from which emigration to Bengal and Assam is most common are those in the east of the province, some part of the difference noticed is factitious, and two or three districts, which show an excess of females in the actual population, are found to have a slight deficiency when the emigrant males are allowed for. This, however, only modifies the result and does not affect the general proposition that females are in excess in the east, and males in the west. Mr. Burn points out, moreover, that in the former tract females are more numerous than males amongst castes that do not emigrate as well as amongst those that do, and also that the excess is greater amongst Muhammadans than amongst Hindus, although, as a class, the former are far less prone to emigration. The proportion of females is lowest in the high castes, and gradually increases as one descends the ladder of social respectability; it reaches a maximum amongst the aboriginal races in the south-east.

Madras

198. Although Madras, as a whole, has a considerable excess of females, this is not shared by all districts, and it is only in the north and south that they outnumber the other sex. The excess of males is found in a compact block of country, stretching from Madras northwards almost as far as Cocanada, and in the Agency tracts.* It is difficult to say how far these variations are due to migration. There is an extensive exodus to Burma and Ceylon, in which males exceed females to the extent of about 260,000, but the census returns for those countries furnish no details as to the particular districts which have supplied these emigrants. So far as can be judged from the imperfect statistics of emigration by sea collected under executive orders, it would seem that they come mainly from Tinnevely, Madura, Ganjam, Vizagapatam, Godavari, Tanjore and Madras, all of which, except Madras, are tracts where females are in excess. The same statistics show an extensive emigration to the Straits Settlements from Tanjore, and it may be concluded that these movements account for a great part, though not for the whole, of the difference in the proportions. Mr. Francis finds that there is no special tendency for the proportion of females to vary according to the social status of a caste, but it is unusually small in the case of the Malayálam-speaking Bráhmans, the majority of whom allow only the eldest son of each family to marry within the caste, and leave the others to contract alliances with Náyar women.

Bombay and
Punjab

199. The general deficiency of women in the Bombay Presidency is most marked in Sind, which adjoins the Punjab, where an illicit traffic in women was

* The Nilgiris lie outside this block, but the excess of males is here due to the importation of labourers for the coffee estates.

It is possible that there may be some racial peculiarity in the districts where males are in excess. Mr. Thurston has found a marked divergence in the head measurements taken by him in the Bellary district from those commonly regarded as typical of the Dravidian race.

formerly carried on extensively, along the Indus, by men who enticed them away from their homes in the Punjab. Only four districts in the whole Presidency contain more women than men, and even here the result is due mainly to migration; when this is allowed for, the excess of females in two of these districts disappears altogether, and in the other two, Ratnagiri and Satara, the proportion falls from 1,133 and 1,015 per 1,000 males to 1,030 and 1,005 respectively. The Superintendent finds that, as in Northern India, the castes with most women are those at the bottom of the social ladder.

In the Punjab the proportion of females is highest in the Himalayan states and districts and lowest in the west and south-west. In spite of the fact that Muhammadans are most numerous in the tracts where females generally are in most marked defect, they have a slightly larger proportion of this sex than the Hindus, while the Sikhs have by far the smallest. Amongst Hindus the higher the caste, the lower the proportion of women in it.

200. The sex proportions in Burma are much disturbed by the large number of immigrants, but the general result seems to be that the females outnumber the males in Upper, and are in a minority in Lower, Burma. The proportions for the principal indigenous races show an excess of females amongst the Burmans, Shans, Chins and Kachins, and a dearth amongst the Talaings Burma, Central Provinces and Assam

In the Central Provinces the balance is in favour of women everywhere, save in a few scattered areas on the border, but in spite of their general numerical superiority, they are in a minority amongst the higher castes.

By discounting the effect of migration, the general proportion of women in Assam rises from 949 to 973 per 1,000 males. Women are most numerous in the hill districts, where their position is most assured and they marry as adults, and least so in the plains, especially in the two districts at the eastern extremity of the Brahmaputra Valley. The largest number of women is found amongst the Lushais, Lálungs and Khásis where they number respectively 1,191, 1,119 and 1,118 per 1,000 males. It is low amongst the various Bodo tribes and the Chandáls and Kaibarttas, and also amongst certain high castes, in whose case, however, the true proportions are obscured by immigration from Bengal.

201. The proportion of females is steadily rising, and there are now 963 females per 1,000 males, compared with 958 and 954 in 1891 and 1881, respectively. There has been practically no change since 1891 in the Punjab and Bengal, and one or two of the smaller provinces and states show a slight decrease in the proportion in question, but otherwise the general result is shared by all parts of India. Variation in sex proportions at successive enumerations

The decline in Bengal has been continuous since 1881, and appears to be due partly to varying rates of growth in different parts of the province; some of the tracts where females are in a minority have increased rapidly, while some of those where they preponderate are stationary or decadent. In the two tracts where the pinch of famine was mainly felt, *i.e.*, North Bihar and Chota Nagpur, females are relatively more numerous than they were in 1891; while in Central and Northern Bengal and in Orissa their numerical position is distinctly worse than it then was.

The rise in the ratio of females is greatest in the Central Provinces, where it is attributed, not to better enumeration, but to the fact that females are constitutionally stronger and are less liable than males to succumb to the effects of insufficient food and the diseases consequent thereon. Mr Russell points out that "the number of women has tended to increase according to the severity with which different areas have been affected by famine," and says that the fact that women succumb to want of food less easily than men, was observed by several officers of the Central Provinces Administration who assisted in the supervision of famine relief operations. He also cites Dr Cornish's report on the Famine Census quoted in the Madras Census Report for 1881, where it was stated that the male mortality was one-fifth higher than the female, and the conclusion was arrived at that the famine affected most severely the bread-winners among the adults. The same circumstance was noticed in the report on the famine of 1897 in the United Provinces, and it was mentioned by Mr Baines in the India Census Report for 1891. The average reported mortality in the last decade in the Central Provinces gave 844 female deaths per 1,000 male, but in the three famine years, 1896, 1897, and 1900, the corresponding proportion of female deaths was only 838, 801, and 838, respectively. A comparison of the sex proportions at each age with those of 1891 shows that in the population

under 30 years of age there has been practically no change since 1891, but that at all ages from 30 upwards there is a marked rise in the proportion.

202 Mr. Burn in the United Provinces, and Captain Bannerman in Rajputana, are also of opinion, that the deficiency of the food supply is the main cause of the relatively more rapid growth of the female population in these tracts. Mr. Burn ascribes it, not only to their inherently greater capacity for resisting the effects of famine, but also to the decline in the birth-rate which occurs in a famine year, and the consequent reduction in the number of deaths at parturition. There has been a steady rise in the proportion of female births reported in the United Provinces during the decade, from 905 per 1,000 males in 1891 to 931 in 1900. The age statistics show an increase in the relative strength of the female population at all ages except 0-5, 25-30, 50-55 and 60 and over.

The circumstances attending the greater relative growth of the female population in Bombay are not discussed in the Provincial Report, but it is worthy of note that the general result is not shared by Sind which escaped the stress of famine. Moreover, the census of 1891, which followed a decade in which there had been no famine, disclosed a smaller proportion of females than the previous enumeration, which was effected shortly after the disastrous years 1876 to 1878. In the Bombay Census Report for 1891 it was observed that where districts are progressive, the proportion of females tends to fall, and that the reverse is the case where they are decadent. The same phenomenon is noticed at the present census by Mr. Chinoy in Berar. In Assam, where the proportion of females in the natural population is considerably higher than in 1891, the Superintendent is confident that the result is not due to greater accuracy in the enumeration. It proceeds mainly from the figures for two districts, Kamrup and Nowgong, which have been exceedingly unhealthy during the decade, and he concludes that women must be better able than men to withstand the bad effects of an unhealthy climate. The rise in the proportion of females is specially noticeable in the case of the Lálungs whose home is in the tract where *Kalá ázár* has been most prevalent.

Reasons for
excess of
males

203 The difference in the proportion of the sexes shown by the Census statistics may be due to three causes, *viz*, (1) a more complete enumeration of the male population, (2) a larger number of male births, or (3) a heavier mortality amongst females. It is conceivable that females may be omitted from the return, either because their male relatives regard them as of no importance in connection with an enquiry, such as the census, instituted by the Government; or because they have some special reason for not mentioning them, as in the case of girls who have reached the age of puberty while still unmarried; or because they connect the census with some imaginary ulterior motive on the part of Government, such as the desire to provide wives for its sepoys. But before endeavouring to trace the reasons for the excess it will be convenient to quote the general conclusions arrived at in 1891 by Mr. Baines. He held that there was in most parts of India proper "a tendency, in a greater or less degree, to omit "from the census record girls of from 9 to 15, and wives of from 15 to 20, or "thereabouts, but that in every part of the country, except the north, girls below "5 years old were returned as more numerous than boys of that age. After "that period, apart from wilful or ignorant omission, there is probably a real "deficiency in the number of females, extending to about the twentieth year, "more or less, and due to neglect, functional excitement, premature cohabita- "tion and unskilful midwifery. At a later period, hard work, as well as the "results of the above influences, and, amongst some classes, excessive fecundity, "tell on the female constitution, producing greater relative mortality than "prevails in the other sex, though towards the end of life, the latter succumb "to old age sooner than the survivors from amongst their mates. It is also pro- "bable that, either from difference or inferiority in nutrition, or from climatic "influences, female life is, on the whole, better in India on the coast and hills "than on the hot and dry plains."

(1) Conceal-
ment of
females

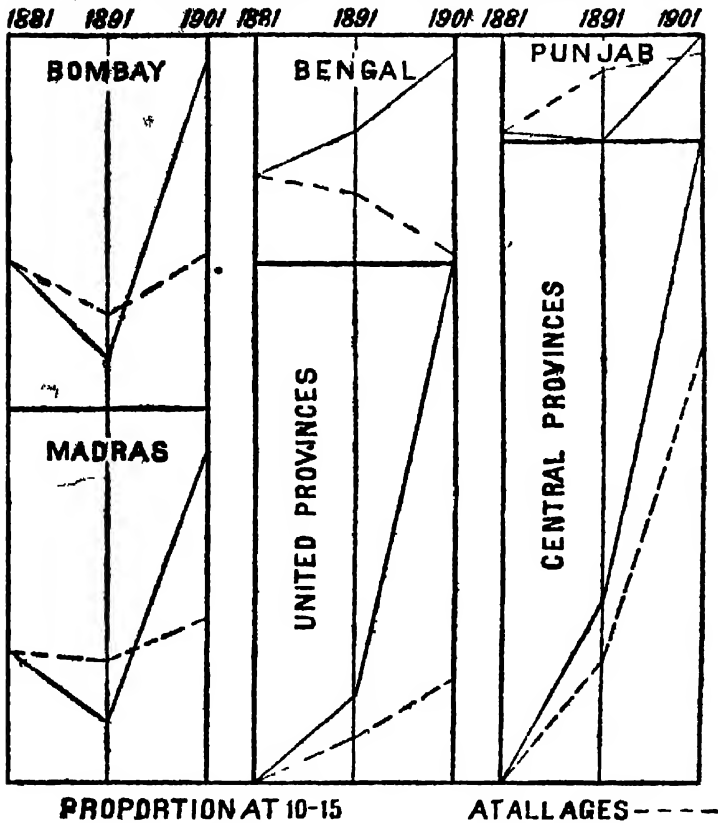
204 The theory that females have not been fully enumerated rests mainly upon two grounds, firstly, that it is *a priori* not improbable, and that it affords a ready explanation of the disproportion indicated by the returns, and secondly, that the deficiency occurs mainly at particular age periods, and especially at the age '10-15' when, if at all, it is likely that females would be concealed. The latter phenomenon will be more fully discussed further on,* but it may be stated here that it seems to be due partly to the greater inaccuracy of the ages

* Paragraph 220

returned for females and partly to a higher mortality amongst them at the time when puberty is reached, owing to general functional derangement at this age and the evil effects of premature child-bearing.

205. It will be seen from the diagram given in the margin, which shows for

Diagram showing the variation since 1881 in the proportion of females to males (a) aged 10—15 (b) at all ages



several of the larger provinces the variations since 1881 in the proportion of females to males (a) at the age period '10—15' and (b) at all ages, that there is no general correspondence between the two curves, while in Bengal a steady rise in the proportion of females at '10—15' has been accompanied by an equally steady fall in the proportion at all ages; this would seem to show that the main reason for the former must be a progressive improvement in the accuracy of the age return rather than greater success in securing a complete enumeration of females at the time of life under consideration

In no other province is the divergence between the two curves so marked as it is in Bengal, but on the other hand the United Provinces is the only tract where the increase in the proportion at '10—15', as compared with 1891, is sufficiently great to account for a

material part of the increase in the proportion at all ages.

206 As regards the assumption that because females generally are in defect, therefore they have not been fully enumerated, it may be noted that save in a few exceptional tracts the tendency to conceal would be a fairly constant factor, but the deficiency of females is not at all universal, and there are large areas where their number exceeds that of the males, and where the phenomenon cannot be explained by any difference in the state of feeling regarding women. There is, for example, no reason why women should be suppressed in North Bengal, where they are in a minority according to the census, any more than in North Bihar where they are more numerous than males. So also in Madras, there is no difference in the state of feeling in regard to women between the districts where they outnumber the males and those where they are in defect. Moreover, if there is any concealment, it is more likely to occur amongst Muhammadans than amongst Hindus, but in most provinces Muhammadans have a larger proportion of women than their Hindu neighbours. The wilder hill tribes might omit to mention their women through fear, but the deficiency in their case is by no means universal, and in some instances it is these very tribes who return the highest proportion of all. In Bengal the paucity of females is most noticeable amongst certain race castes of North and East Bengal, whose women move about freely and many of whom suffer no loss of esteem or status if they fail to marry their girls before the age of puberty. It is true that the dearth is generally more marked amongst the higher castes, but this is not the case in Orissa or Madras and, where it exists, it can be explained, as will be seen further on, on other grounds, such as difference of race and social practices.

207 There is again no direct evidence of the concealment of women, and it does not appear that, in the course of testing the work of enumerators, any general tendency to leave women out of the reckoning was detected. In the Punjab, where, in spite of the fact that the census agency is composed more largely than elsewhere of officials and is therefore presumably more efficient, the deficiency of females is most marked, special enquiries were made in order to ascertain if they had been less completely enumerated than males, and the conclusion arrived at was that this was not the case.

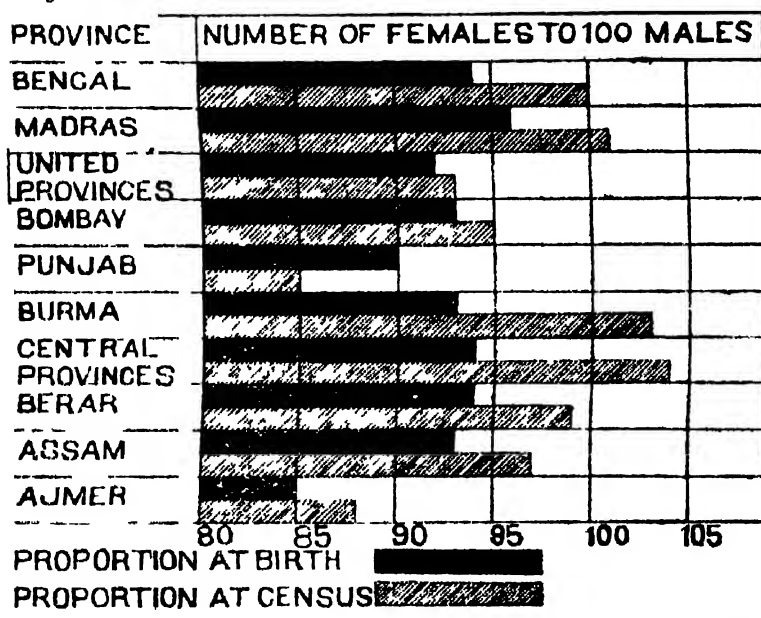
The fact that at each succeeding census the proportion of women has risen has been accounted for on the supposition of a progressive improvement in their

enumeration, but the changes recorded may equally well represent actual facts and may be due either to changes in the relative mortality of the two sexes or to an alteration in the proportions at birth. There may have been omissions at the earlier censuses, though not by any means on the large scale that has occasionally been suggested, but the general trend of opinion amongst the Superintendents of the present census is that, on this occasion at least, concealment, intentional or otherwise, has had but a very small influence on the figures,* and one of them, Mr. Rose, has pointed out that the greater accuracy which characterizes each successive enumeration bears most fruit at the final revision on the census night, by the discovery of persons absent at the preliminary enumeration, such as travellers, boatmen, visitors, traders and the like, who are mostly males † Moreover, the influence of improved methods operates everywhere, but some localities and social groups show a smaller proportion of women than in 1891. Lastly, all the world over, there is an excess of males at birth, but in Europe this is more than counterbalanced by their relatively higher rate of mortality. If it can be shown, either that the ratio of male births in India is even greater than in Europe, or that there are reasons why females at the earlier ages have not in this country the same advantage over males that they have in Europe, the excess of the latter will be amply accounted for without assuming that the census figures for females are incomplete.

(2) Excess
of males at
birth

208. The number of females born to every 100 males according to the birth returns of some of the larger units is shown in Subsidiary Table III. In all cases these statistics show a considerable deficiency of females at birth, the proportion per 100 males ranging from 90 in the Punjab to 96 in Madras. It may be said that this general deficiency of females is due to the incomplete reporting of female births, but this does not seem to be the case, ‡ and the general result has

Diagram comparing the proportion of the sexes at the Census (Natural population) with that according to the birth returns for the decade 1891-1900



its counterpart in Europe where the proportion of females at birth varies from about 92 to 97 per 100 males. In Europe, however, as mentioned above, this numerical disadvantage is quickly remedied by a relatively lower mortality amongst female children. In the annexed diagram the proportion of females to males according to the birth returns is compared with that ascertained at the census. It will be seen that where females are fewest at birth, there also they are in most marked defect at the census, and that where at the census they are more nu-

merous than males, there also the proportion at birth is relatively high. At the same time there is no fixed relation between the two sets of statistics. As a general rule the proportion of females at the census is higher than that according to the birth returns, but the excess is much greater in Burma and the Central Provinces than it is in Bengal and Berar. In Bombay and the United Provinces the two proportions approach equality, while in the Punjab the census shows relatively fewer females than the birth returns. The conclusion seems to be that although the local variations in the sex proportions at the census depend to a considerable extent on the corresponding proportions at birth, there are other influences at work which affect the relative longevity of the two sexes, and which operate to a varying extent in different parts of India. But before considering them we may advert briefly to some of the theories which have from time to time been put forward regarding the causes which determine sex at

* Mr. Lewis suggests that there may have been some concealment in the wilder parts of Burma and Mr. Enthoven is inclined to suspect some omissions, due to carelessness, in Bombay.

† In the case of pilgrims females are usually more numerous than males.

‡ The returns showing omissions from the birth and death returns detected by inspecting officers make no distinction of sex and it is therefore impossible to speak positively on this point.

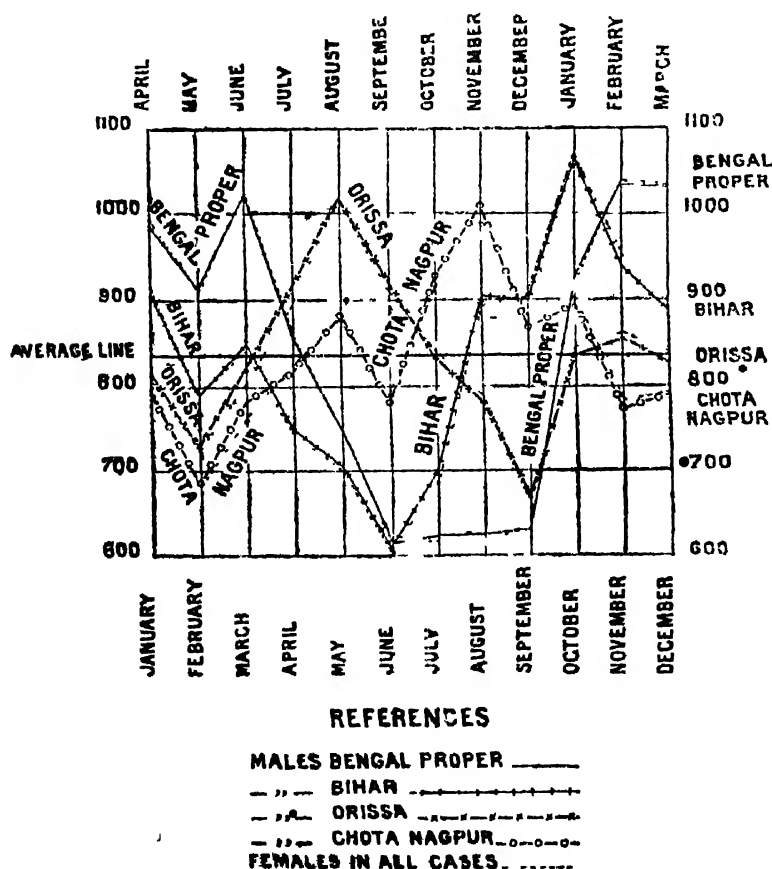
birth and see how far, if at all, they appear to be confirmed or otherwise by our experience in India.

209 It is possible that the proportion of the sexes at birth may be influenced to some extent by race, and it will be noticed that fewer females are born in the north-west of India, where the Aryan * element in the population predominates, than in the south and south-east, which is mainly Dravidian. Except in Madras, where there is probably far less racial difference between the high and low castes than exists in Northern India, it is a matter of general observation that the higher castes, who claim a larger infusion of Aryan blood than the lower castes of the same area, have also fewer females. The proportion amongst Mongoloid races seems variable. In the Western Himalayan region and in Burma, and amongst many of the tribes of Assam, females preponderate, but in North and East Bengal they are in a minority, and this is also the case amongst the Gáros, Koches, Kacháris, Chandáls and Kaibarttas of Assam, who are believed to be closely connected with the Mongoloid element in the population of Bengal proper, they are also in a minority amongst the Lepchas and other Himalayan tribes on the northern frontier of Bengal. Unless this branch of the Mongolian stock has, as is quite possible, an admixture of some element, not shared by the other tribes, the variations noticed would appear to conflict with the theory that race is of importance in connection with the proportion of the sexes. In any case it cannot be the sole factor, as the proportion of females to males at birth varies from time to time; in the Punjab for example, it was 91 per cent. in 1896, compared with 88 only four years earlier.

210 Climate is sometimes said to influence sex, but here too, the fact that the proportion of females in the same locality varies from time to time, shows that, even if it is a factor, it is not the only one. It is true that the ratio of female births is often higher along the coast, or within the influence of sea air, and in the hills, than it is in hot and dry plains, but there are so many exceptions as to suggest that the correspondence, where it exists, is accidental. Bihar, though hotter, drier and further from the sea than Bengal proper, has a higher ratio of females. In Madras Mr. Francis finds it impossible to connect the variations in any way with the climate, and in Burma females are relatively more numerous in Upper Burma, which is hot and dry, than they are in the damp districts of Lower Burma along the sea coast.

211 The season of gestation has been held to affect the sex of the child. Statistics have been compiled in Bengal† showing for each sub-province the proportion of female to male births in each month during the last decade and although it is difficult to establish any general co-ordination, it is clear that there are seasonal variations. In Bengal proper the proportion of male births is least in December and January and greatest in August and September; in Bihar it is least in October, November and December and greatest in July, in Orissa the minimum excess is found in August, October and December and the maximum in March, and in Chota Nagpur the corresponding extremes are in June, September, October and November on the one side and March, July and August on the other. It will be seen from the diagram in the margin, which is reproduced

Diagram showing the average monthly number of births per 10,000 reported yearly during the period 1892—1900



NOTE.—The month in which the births occurred is shown at the bottom, and the probable month of conception at the top, of the diagram

* By Aryan I mean the people that brought the Sanskrit languages to India
 † Bengal Census Report for 1901, Appendix IV, page xxii

from the Bengal Report, that there is no general relationship between these variations and the seasons when the reproductive principle is strongest or weakest. In the Punjab also no correspondence can be traced between sex and the season of gestation.

(iv) Food

212. The dietary of the people is another item which has been held to be of importance in this connection. So far as the properties of the food are concerned it is difficult to draw any inference, except perhaps a negative one, from the state of things in India; the same sex proportions are often found to exist amongst people subsisting on different kinds of grain, while it is not at all uncommon to find different proportions in the case of people whose staple food is the same. More stress has been laid by certain enquirers on the sufficiency or otherwise of the food, but they are not agreed as to the result to be expected from it. According to some, women who have been enfeebled by insufficient sustenance are more likely to produce female children, while Dusing, whose opinion is quoted with approval by Westermarck, holds that "where nourishment is abundant, strengthened reproduction is an advantage to the species, whereas the reverse is the case where nourishment is scarce. Hence the power of multiplying, depending chiefly on the number of females, organisms, when well nourished, produce comparatively more female children, in the opposite case more male." It is alleged, in support of this theory, that an excess of male births is found where vitality is low, as amongst the poorer classes, or where polyandry is practised, or where intermarriage between cousins is common. There seems to be very little in the statistics which have been collected to confirm either hypothesis. The sex proportions at birth have scarcely varied a single point in Bombay during the last decade. In the Central Provinces male births were slightly above the average rate of the decade in one famine year, 1897, but in another, 1900, they were below it. In the famine districts of Bengal the ratio was normal throughout the period affected by the short crops of 1896. The balance of probability, if any, seems rather in favour of the view that mal-nutrition on the part of the female tends to the production of female children. In the whole of Northern India females are more numerous amongst the lowest classes, who are also the poorest, than amongst those at the top of the social structure, and in Bengal, the tract where women are fewest is also the tract where the people are most prosperous. These, however, may be mere coincidences, and may be due to other circumstances such as race or social practices. Sometimes, as in Orissa and South Bihar, we find very different degrees of material well-being coupled with almost uniform proportions of the sexes at birth.

(v) Consanguineous marriages.

213. The marriage of cousins, which is said by Dusing to lead to male offspring, is common among Musalmans, but they usually have a larger proportion of females than their Hindu neighbours. It is also common amongst the Dravidian races whose females are generally in excess.

(vi) Polyandry.

214. As regards polyandry, the tendency to male offspring, if it exists, might be due to causes other than its injurious influence (if any) on the female parent, but it is not clear that the practice is in fact accompanied by the more frequent birth of males. In the Western Himalayas the polyandrous tribes have generally more females than males. The Náyars of Southern India have also an excess of females. There are clear traces of polyandry amongst the Khásis, whose females are specially numerous, as well as amongst certain Bodo tribes where they are in a minority.

(vii) Other theories.

215. There are some theories which the statistics cannot be invoked to verify or disprove, such as the view that sex is inherent in the germ itself or depends on the degree of ovular maturity at the time when conception takes place. To the same category belong the theories of ancient Hindu writers, who held that the female principle is weaker on certain days than on others, and that conception on even days following the commencement of the menses tends to result in male, and on odd days, in female, children. This general tendency, however, may, it is said, be counteracted, if one sex or the other is specially vigorous, and a strong and healthy woman, if she wishes to be blessed with male offspring, is advised to fast or reduce her diet at the time when she expects to conceive. For the same reason it has been ordained in the *Shástras* that the husband should be older than his wife, as he would then ordinarily be more vigorous and have a greater chance of influencing the sex of the offspring. These views are allied to the theory hazarded in the English Census Report for

1881, where it is said that "there are some reasons for believing that one, at any rate, of the causes that determine the sex of an infant, is the relative ages of the father and mother, the offspring having a tendency to be of the same sex as its elder parent." This is a definite statement which there would be specially good opportunities of verifying in India if the vital statistics for the main castes could be tabulated separately, as, in any given locality, the practice of a caste in respect of the age at which marriage is effected is fairly uniform. In Bengal the theory seems to receive some confirmation from the circumstance that in Bengal proper where males are generally married as adults to girls who have not reached the age of puberty, the ratio of male-births is higher than in Bihar or Chota Nagpur, where the ages of bride and bridegroom are more nearly equal. Sufficient information is not available to enable the subject to be examined in any detail, but it may be noted that the higher ratio of females usually noticeable amongst Muhammadans, who are less prone than the Hindus to marry their daughters at a very early age, is consonant with the theory alluded to.

It is sometimes supposed that intense desire for a child of a particular sex might have some effect, but this seems very unlikely. The Hindus earnestly desire male children and in some parts a special religious ceremony is performed, before cohabitation commences, with the object of procuring male offspring. This feeling, however, prevails all over India, but the ratio of male births varies greatly and in some parts is lower than in Europe.

It has been said again that female infanticide long continued leads to a larger proportion of male births, and it is certainly the case that the ratio is highest in those parts of India where this practice was formerly common. It would be necessary, however, to collect much more evidence than this before it could be said that it is anything more than an accidental coincidence.* And even then it might be that the high proportion of males is due to the custom, mentioned by Mr. Rose, of causing abortion where the native midwife reports that the pregnancy is probably that of a girl.

216. We have seen that the number of males at birth generally exceeds that of females to a relatively greater extent than it does in the case of the persons enumerated at the census. If, therefore, the Indian statistics stood by themselves, it would be needless to seek any further explanation of the surplus of males, but when it is found that in spite of a similar state of affairs in Europe, so far as the proportions at birth are concerned, the mortality in the early months of life is so much greater in the case of males that they very soon lose their numerical advantage, it becomes necessary to enquire why the same phenomenon does not occur in India, and whether there are any conditions existing in India but not in Europe, which are adverse to female life. The possible causes of higher female mortality in India (a) female infanticide, (b) a comparatively greater neglect of females, especially at the earlier ages, (c) premature cohabitation and child-bearing coupled with unskilful midwifery, (d) hard work in the case of the lower classes, and (e) general adverse conditions of climate, nutrition, house accommodation and the like.

217. And first comes the question of female infanticide. It is significant that where the proportion of females is lowest, *i.e.*, in the Punjab and the adjoining tracts in Sind, Rajputana and the United Provinces, large sections of the population are, or were formerly, suspected of this practice. Mr. Rose, who has gone into the question with some fulness, shows that the proportion of female children is lowest amongst most of the Rājput and Jāt tribes; that it is far higher, on the average, amongst those who are Muhammadans and are thus troubled with fewer artificial restrictions on marriage, than amongst Hindus and Sikhs; and that, in the case of the Jāts, the Sikhs have a lower proportion of females than the Hindus. There are, however, exceptions and amongst certain tribes the Muhammadans have also a very low proportion of females. Mr. Rose quotes numerous instances of folklore and superstitious belief connected with infant life which familiarize the people with the practice of infanticide, and mentions that, alike among Muhammadans, Hindus and Sikhs, there are no rejoicings on the birth of a girl. His final conclusion is that, except possibly amongst the Jāts, who, be it remembered, form more than a fifth of the total population, actual infanticide is rare, and occurs only when the prospective difficulty of finding a husband is combined

* This is another instance where the separate tabulation of the birth and death returns of each caste might furnish useful information. It would then be possible to compare the sex proportions at birth for different castes, some of which practise infanticide while others do not.

with a superstitious belief that the child is likely to cause misfortune, but that ignorance and an unconscious ill-treatment of females result in a relatively high rate of mortality at all ages. In the case of the Jâts, with whom the practice is thought to be more common, it is due, not to the laws of hypergamy, which would affect only the higher sections, but to a desire to avoid the difficulty and expense of rearing children of the female sex.

The Superintendent of Census in Bombay says that female infanticide was formerly in vogue amongst certain tribes in Sind and the Jadeja Rájputs in Cutch. The common method of destruction was to drown the children in vessels of milk, or in holes made in the ground and filled with the same liquid. The signal "*dudh pilao*," given at the birth of a female infant, was sufficient to secure its destruction. In other cases, female infants were either given opium or left uncared-for until they expired. At the present day, says Mr. Enthoven, the practice may be assumed to be of rare occurrence. The same view is held by Mr. Burn in respect of the United Provinces, where, however, a special law is still in force for the supervision of certain clans, resident chiefly in the tracts adjoining the Punjab, who were undoubtedly at one time greatly addicted to the practice. In Baroda the Census Superintendent asserts that amongst the Lowa Patidars of certain Kulin villages there are clear signs of female infanticide, and the figures which he gives certainly show an extraordinarily low proportion of females.

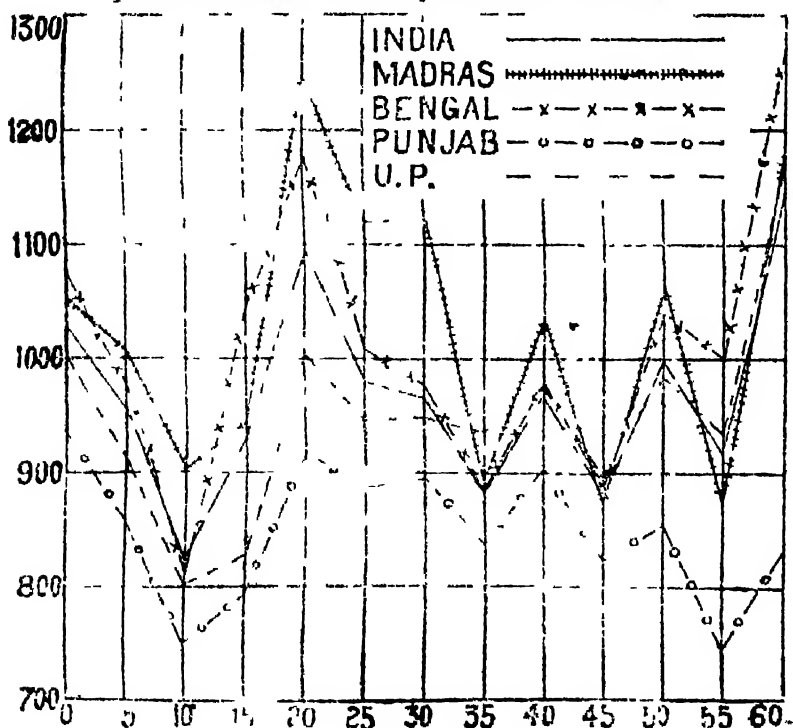
Neglect of
female
infant life

218 But if the practice of deliberately doing away with female infants is now confined to a limited area, and even there is perhaps somewhat rare, there is little reason to doubt that in most parts of India female infants receive far less attention than males. It is almost universally the case that, whereas male offspring are ardently desired, the birth of a female child is unwelcome. It is especially so where the provision of a husband is a matter of difficulty and expense and where there are already several female children in the family. Consequently, even if there is no deliberate design of hastening a girl's death, there is no doubt that, as a rule, she receives less attention than would be bestowed on a son. She is less warmly clad, and less carefully rubbed with mustard oil as a prophylactic against the colds and chills to which the greater part of the mortality amongst young children in India is due; she also probably is not so well fed as a boy would be, and, when ill, her parents are not likely to make the same strenuous efforts to ensure her recovery. It seems clear, therefore, that, even if they are constitutionally stronger than boys, girls in this country, especially amongst Hindus, are less likely than in Europe to reverse the birth proportion of the sexes by a relatively low mortality during the early years of life.

Reference
to age
statistic

219. The inaccuracy of the age return generally, and especially of that por-

Diagram showing the number of females to 1,000 males at each age period in India and some of the main Provinces



Note.—The numbers at the top of this diagram refer to the initial figure of each age period. '0-5' means the period '0-5', '5-10' refers to '5-10', and so forth. The last number '60' does not refer to the age of 60 upwards.

tion of it which relates to females, renders it impossible to place much reliance on the ratio of females to males at each age period, as exhibited for India and some of the larger Provinces in subsidiary table No. II. It will be seen from the diagram in the margin that the curves drawn to indicate this proportion jump about in a most remarkable manner. From the age of 25 onwards, the fluctuations are clearly attributable to the greater inaccuracy in respect of females and to the consequent piling up of their ages at all multiples of 10, coupled with a special tendency to exaggeration when the latter years of life are reached.

If we take the total population living below 30 years of age, the proportion of females to males in India as a whole is as 969 to 1,000 which is very little less than the proportion at all ages. It would thus appear that in India as a whole the span of life enjoyed by females does not much exceed that of males. The only noticeable exception in respect of locality is afforded by the Central Provinces, where the proportion of females to a thousand males at the age of 30 and upwards is 1,087 compared with only 1,034 in the total population of all ages. This result is peculiar to the present census, and in 1891 the corresponding figures were 986 and 998 respectively. This seems to show that it is due to some condition peculiar to the decade and, therefore, it may perhaps be assumed,

to famine; if so, this confirms the view put forward by Mr. Russell that women are better able than men to withstand the effects of a calamity of this kind. In this connection the marginal statement is instructive. It shows that the growth in the proportion of females in the provinces where it is most noticeable has taken place at the higher ages and is, therefore, due to an improvement in their relative longevity rather than to a rise

Province.	Variation per cent. in proportion of women to men compared with 1891	
	At all ages	Aged 30 and over
Bengal	— 7	— 15
Madras	+ 5	+ 3
United Provinces	+ 8	+ 7
Bombay	+ 8	+ 16
Punjab	+ 2	+ 37
Burma	nil	— 12
Central Provinces	+ 36	+ 102
Assam	+ 7	— 3

in the proportions at birth or to a more complete enumeration of young women. So far as the mere figures go it would appear from subsidiary table II that females enjoy a greater longevity than males in the United Provinces also, but the true proportions are here obscured by the large number of emigrants, amongst whom adult males greatly preponderate, and the real advantage on the side of the fair sex is much smaller than the figures would seem to indicate.

Turning to the proportions by religion we find that, at all ages from 0 to 30 taken together, the proportions of the sexes for both religions are much the same, but whereas amongst the Hindus the ratio of women to men after the age of 30 improves slightly, in the case of the Muhammadan section of the community it tends to fall off. The reason for this seems to lie in the fact that, owing to various causes, and especially to the practice of widow marriage, the Muhammadan female is more prolific and pays for this by a shorter span of life, and that the enforced widowhood to which her Hindu sister is condemned, however wearisome and monotonous, tends to greater longevity.

220 We have still to seek some explanation of the fact that while the general proportion of females to males under 30 years of age is about the same as in the total population, there is an extraordinary deficit at '10—15,' which is compensated for by an excess at the two extremities '0—5' on the one side and '20—25' on the other. It seems scarcely possible that it can be due to concealment, as if so, the true proportion of females under 30 would be greatly in excess of the proportion at the higher ages, and this too, in spite of the fact that at birth males are the more numerous. The proportion, moreover, is even lower in the case of Muhammadans, who have no special reasons for concealing unmarried females at this particular age, than it is amongst Hindus. It is therefore, it would seem, more likely that the deficiency, with its concomitant excess on either side, is due mainly to the greater inaccuracy of the age return in the case of females. We have seen that at the higher ages there are marked fluctuations which can be accounted for in this way and no other, and if, at the age 10—15, the inequality is still greater, it may well be due to the fact that, at this age, the general inaccuracy of the return for females is further exaggerated, not only by intentional misstatement, but also by an unconscious tendency to minimise the ages of unmarried girls and to overstate those of the married. Having regard to the figures on either side, it is impossible that there can be more females than males at the age-period 20—25, and the main cause of the excess is, probably, the exaggeration of the age of married girls with children. Similarly, at the earlier ages, the figures for females seem

Explanation
of apparent
deficiency of
females aged
10—15

to be swollen by the inclusion of unmarried girls who are really older than their parents were willing to admit. A fall in the proportion of females to males at the age period '10—15' is also found in the death returns where there can be no special motive for concealment of nubile females.* The proportion of female deaths at this critical age is, in all probability, above the mean for all ages, but the number actually reported is far below it. The only possible explanation is that many of the deaths which properly belong to this age period have been wrongly assigned to those above and below it.

221 There is also, in all probability, a genuine decline in the proportion of females at the age when puberty is reached. Even in England, the proportion falls slightly below par at this critical time of life, and if this is the case in a European country, a much heavier fall is naturally to be expected in India, where the maladies due to functional derangement, consequent on the attainment of puberty, are greatly intensified by premature cohabitation and parturition. The evil effects of early marriage on female life are clearly shown by a

Province	Number per 100 females aged 10—15 who are married	Order in respect of proportion of females to males at 10—15 as compared with that at all ages
Bengal	57	8
Madras	23	2
United Provinces	54	6
Punjab	27	2
Bombay	46	4
Burma	1	1
Central Provinces	37	5
Assam	29	7

comparison of the proportion of females to males who are living at the age '10—15' in each province with the proportion of females of that age who are married. In Burma practically no girls of the age in question are married and this is the part of India where the proportion of females at this age is highest as compared with the proportion at all ages. The second place in this respect is shared by Madras and the Punjab, where girls of this age

are less frequently married than in any other part of India outside Burma, while Bengal, where child marriage is most common, stands at the bottom of the list. It may therefore be said that the proportion of females at the age '10—15' varies inversely with the number who are married at this period of life. The only exceptions to this generalization are afforded by the Central Provinces and Assam. The latter province has a very small population and the results are disturbed by migration, while in the Central Provinces the divergence is not great and may be accounted for by the effect of the famine on the sex proportions at the higher ages. It is of course not alleged that the ill effects of early marriage are the sole, or even the main, cause of the variations here noticed. To a great extent they are fictitious and attributable to the intentional misstatement of the ages of females at this period of life, which has already been alluded to, and which would naturally affect the results to a greater extent in tracts where the prejudices against allowing a girl to grow to maturity while still unmarried are strongest.

222 The general conclusions to be drawn from the age statistics seem therefore to be as follows. There is everywhere an excess of males at birth. For a few years after birth the two sexes have about the same expectation of life, but about the time of puberty there is a relatively higher mortality amongst females. Those who survive this trying period seem for some years to have a stronger hold on life than males of the same age, while from about 30 onwards the two sexes have again much the same general rate of mortality, but if the figures are separated according to religion, it appears that while the Hindu female at 30 has the prospect of a somewhat longer life than a male of the same age and religion, in the case of Muhammadans the males have a slight advantage over the females. After the age of 60 the balance seems to turn in favour of females, but this is possibly due merely to a greater tendency to exaggerate age on the part of old women †

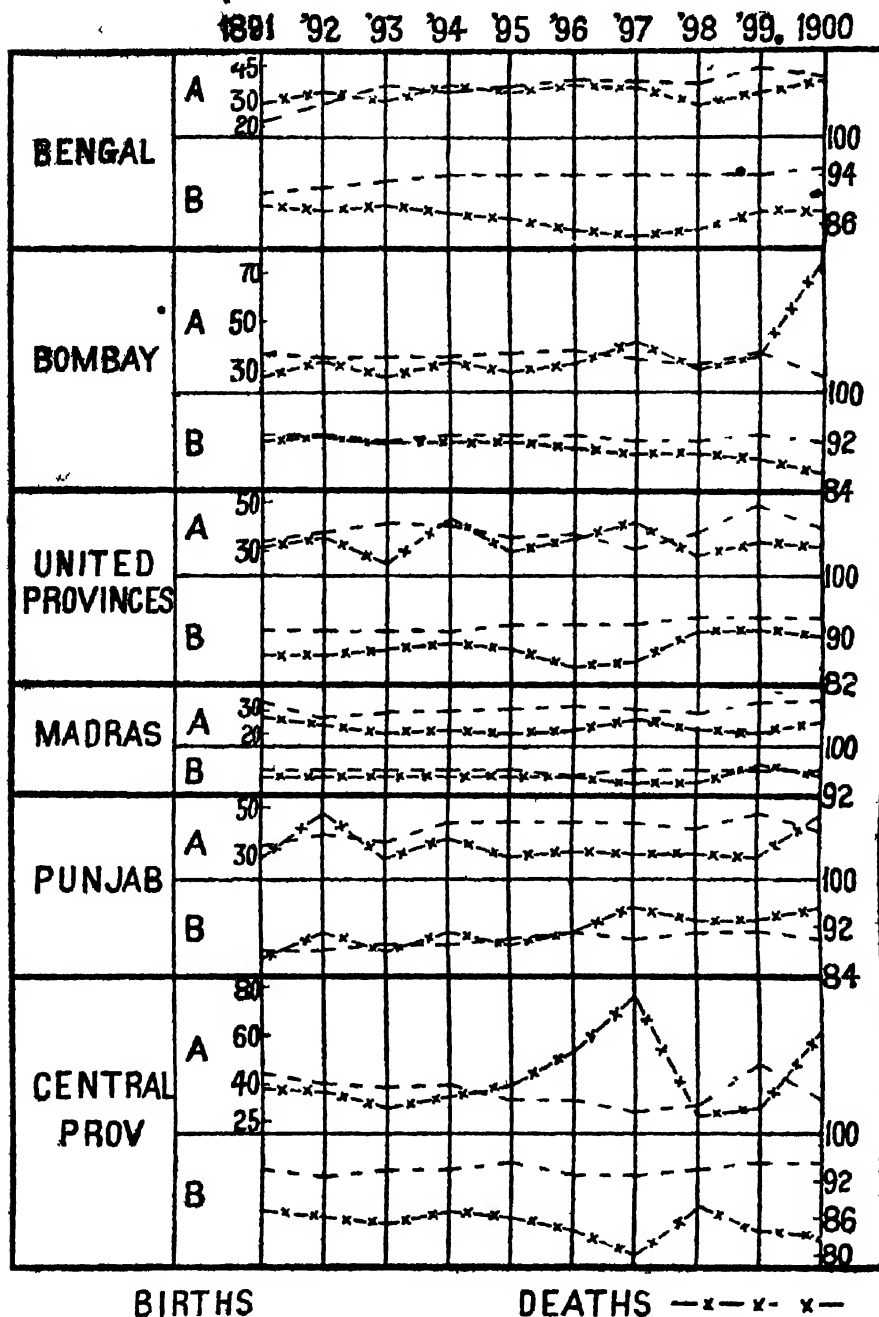
General conclusions indicated by age statistics

* This will be seen from the statement in the margin of paragraph 224.
† It must be borne in mind that it is only 30 years since measures were adopted to put a stop to female infanticide amongst certain Rajput clans of Upper India. It is not likely that these measures, which affected a population of only a third of a million, have much affected the general sex proportions. So far as they have done so, however, the resulting increase in the number of females is confined at present to the ages under 30.

223. We may now revert briefly to the variations shown in the sex propor-

Further examination of change in sex proportions since 1891

Diagram showing the number of male births and deaths per 1,000 of population, and female births and deaths per 100 males for each year 1891 to 1900.



NOTE.—The curves opposite the letter A, indicate the number of male births and deaths per 1,000 of the male population and those opposite the letter B, the number of female births and deaths per 100 male births and deaths. The figures on the left of the curve refer to A, and those on the right of it to B.

tions since 1891, and in doing so it will be profitable to notice the main results disclosed by the birth and death returns. The general collection of these statistics has been undertaken only in recent years and the moderate degree of accuracy which they now possess dates in most provinces only from the early part of the last decade. It is impossible therefore to utilise them as fully as might be desired, but even as they stand they present several interesting features. These are portrayed in the annexed diagram, which shows for each of the main provinces, other than Burma and Assam where the returns are still very incomplete, (a) the variations from year to year in the number of male births and deaths per thousand of that sex and (b) the number of female to 100 male vital occurrences of each kind. The first feature to be noticed is that already al-

luded to, *viz*, the failure of the female

death-rate to rise with that of males in famine years. This is clearly shown by the curves for Bombay in 1900 and for the Central Provinces in the same year and also in 1897, as well as, though in a less degree, by the curves for Bengal, Bombay and the United Provinces in 1897, and by that for the latter province in 1896. The regularity of this phenomenon is so marked and it agrees so fully with the observations independently arrived at by competent observers that it cannot be ascribed to accident or omissions on the part of the reporting staff. It seems, therefore, clear that females are better able than males to resist the ill effects of famine, and as the Census statistics show that the improvement in the ratio of women has occurred mainly at the age of 30 and upwards, it may be concluded that it is amongst adults that their constitutional superiority in this respect is most marked. There has been slight decline in the proportion of females at the age '60 and over' but this is due probably to a smaller degree of inaccuracy in the reporting of female ages at the present Census.

224. Further light is thrown on this subject by the death returns distributed according to age. The number of female, to 100 male, deaths reported at each age

Reference to birth and death returns

period in 1891, when the conditions were normal, is compared in the margin with

Age	NUMBER OF FEMALE DEATHS PER 100 MALE.					
	Central Provinces.		Bombay		United Provinces	
	1891	1897	1891	1900	1891	1897
Under 1 year	86	89	85	92	90	95
1—5	89	87	96	97	99	102
5—10	80	77	92	88	76	79
10—15	79	69	91	80	71	70
15—20	91	73	115	88	114	103
20—30	101	78	115	89	101	90
30—40	81	70	91	80	78	72
40—50	71	65	69	67	75	72
50—60	79	77	76	70	74	73
60 and over	101	100	107	104	81	80

the number reported in a famine year for the three main provinces which suffered most during the decade. It will be seen that under the age of 5 the proportion of female deaths in the famine year taken for comparison was slightly higher than in 1891; at '5—10' it was about the same, but then quickly declined, reaching a minimum at the age '20—30' after

which it again rose slowly, but at no subsequent age reached the proportion returned in 1891

Various reasons have been assigned for the greater power of resistance to famine which females undoubtedly enjoy. According to some, men wander more than women during a famine and, when away by themselves, often have to eat carelessly prepared food, while the women, who do their own cooking, are less likely to suffer in this way. The women again, as a class, are more often given gratuitous relief, and when they attend relief works, their tasks are comparatively easy. When scarcity begins to be felt, conception takes place less freely, and this means fewer deaths from diseases of pregnancy and parturition. But the most potent reason seems to be that, after reaching maturity, women are constitutionally stronger than men, and have, besides, more fat and less muscle in their composition, so that they not only need a smaller quantity of food to support their frames but are also better able to endure the wasting process. It is a physiological fact that women require less food to support life than men do, but the differentiation of famine relief according to sex was abolished before the famine of 1900, and even in 1897, it was not always observed, so that in the past, women have probably received better treatment than men in proportion to their physical need*.

In all provinces the reported vital occurrences for females are proportionally less numerous than those for males, but in Burma, the Central Provinces, and Bengal the deficiency is far greater in the case of deaths than it is in that of births. This should indicate a relatively greater increase in the female population than in the male, and such an increase has actually taken place in the Central Provinces. In Burma the disproportion is due in a great measure to the large immigrant population, which consists chiefly of males, and helps to swell the mortality returns for that sex; in Bengal also the presence of immigrants from up-country has to some extent affected the figures. It is, moreover, possible that the deaths of neglected female children and also of Hindu widows, who live a retired and secluded life, are not so completely reported as those of the rest of the population. The net result of the vital statistics collected in India during the decade 1891—1900 is that there are 89 female, to 100 male, deaths. In European countries the corresponding proportion ranges between 86 in Saxony and 100·6 in Ireland, but in Europe the number of females in existence is generally greater than that of males, and a higher relative death rate is therefore only natural. As compared with the proportion of females to males amongst the living the proportion at death is higher in India than in Europe.

225. The last point to be noticed is that the returns indicate a slightly higher proportion of female, as compared with male, births towards the close of the decade in the Punjab, the United Provinces, Bengal and the Central Provinces. Variations in the sex proportions at birth are not unknown in Europe, and in England the proportion of male, to 1,000 female, births declined from 1,050 in 1838-47 to 1,036 in 1891-95.† In Hamburg, on the other hand, it rose from 1,032 in

* The Famine Commissioners of 1901 recommended that the sex distinction should again be adopted.

† The proportion of male, to 1,000 female, births during 1901 was—in England 1,039, in Scotland 1,052, and in Ireland 1,061

1885 to 1,075 in 1895. There is therefore no *a priori* reason why similar variations should not take place in India. At first sight the birth returns appear to be contradicted in this respect by the results of the census which shows a smaller proportion of females to males at the ages '0—5' than that which existed in 1891. The contradiction, however, is probably not real. The proportion of females of all ages from 0 to 30 taken together has risen during the decade, and the diminution which has taken place at the period '0—5' and also at '25—30' seems therefore to be due to a more accurate return of female ages than to any real deficiency at these two age periods. The irregularities in the proportion of females to males at the different ages from 0 to 30 as shown in the diagram in the margin of paragraph 219, though still considerable, are less noticeable at the present census than in 1891, and it would seem that this can only be due to the more successful elimination of mistakes regarding the ages of females.

The final conclusion as to the growth of the female population is therefore ^{final} that it is due mainly to a relatively smaller mortality, especially in the famine ^{conclusion} years, but that there has also been a slight rise in the proportion of females to males at birth.

As regards the causes which influence sex at birth, the findings, if such they can be called, which we have arrived at, are all of a negative character. In a work quoted by Mr. Baines in 1891* the authors say.—

"The number of speculations as to the nature of sex has well nigh doubled since Drelncourt in the last century brought together 262 'groundless hypotheses' and since Blumenbach quaintly remarked that nothing was more certain than that Drelncourt's own theory formed the 263rd. Subsequent writers have, of course, long ago added Blumenbach's *Bildungstrieb* to the list, nor is it claimed that the generalization we have in our turn offered has yet received 'final form' if that phrase, indeed, be ever permissible in an evolving science, except when applied to what is altogether extinct."

In spite of all that has been written on the subject the only possible conclusion is that of Professor D. J. Conrad who says.—†

"Die Frage ist bis jetzt als noch ungelöst und in volliges Dunkel gehüllt anzusehen."

226. We have hitherto been considering the proportions of the sexes in the ^{Proportion of} general population. It will be interesting to glance briefly at the corresponding ^{females in} figures in towns. Except in Madras, females are ^{towns} generally much less numerous in urban than in rural tracts, and in Burma, Assam and Bengal the deficiency is very noticeable. It is also more

Towns in	Number of females per 1,000 males.
Assam	728
Bengal	760
Bombay	854
Burma	712
Central Provinces	966
Madras	1,038
Punjab	812
United Provinces	916

marked in large towns than in small ones, and the only exception to the rule that as the town increases in size the proportion of females falls, is in the case of those with a population of less than 5,000 persons, where it is explained by the fact that such places did not fall within the general census definition of 'town', but were specially treated as such on account of their distinctly urban character. The paucity of females is specially noticeable in the case of Calcutta, where they are only half as numerous as the males. The inhabitants of urban areas are to a great extent merely temporary residents, whose permanent homes are elsewhere, and they frequently leave their female relatives behind when they come to seek a livelihood in towns. This circumstance explains why in certain towns the reported birth-rate is very low when calculated on the crude population. The number of births depends almost entirely on the number of married women of child-bearing age, and where these are

relatively few in number, the births are necessarily below the normal. The Bengal Report contains a table showing the extent to which the proportion of married women in each town in that province differs from the Provincial average.

227. Where females are in marked defect a relaxation of the restrictions on ^{Effect of} marriage inevitably follows. Sometimes it takes the form of expressly permitting ^{paucity of} ^{females on} marriage.

* Geddes' and Thompson's 'Evolution of Sex'.

† Grundriss zum Studium der politischen Oekonomie, Jena, 1900.

males of a higher caste to marry females of a lower one. Thus in the Punjab, Khattris will marry Arora women and the Aroras in their turn take as their wives women of lower castes. But, more often, it leads to laxity in enquiring into the status and antecedents of the proposed bride, and to a willingness to accept the statements that may be made regarding her by her guardians or vendors. In this way there is in some parts a regular traffic in young females. Girls are often enticed from their homes in the Punjab and sold either in some other part of that province or in Sind. The purchasers of women in the Punjab are mainly Jâts, Aroras and Kirars, but the practice is also known amongst Kambohs and Khattris. According to Mr. Rose "the women so purchased, are not infrequently married, either by the regular ceremonies or by the *Karewa* rite, and though a wife so married is looked down upon by her regularly betrothed and married neighbours, there is, as a rule, no dispute as to the legality of the relationship. A faint pretence is kept up that the girl is of the purchaser's caste, but he usually allows himself to be very easily deceived, and thus women of the lowest castes or Muhammadans are frequently sold and become the wives of Hindu Jâts and Aroras."

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SUBSIDIARY TABLE V.—Number of females per 1,000 males in certain castes.

SUBSIDIARY TABLE I.

General proportion of the sexes by Provinces, States and Agencies.

PROVINCE, STATE OR AGENCY	NUMBER OF FEMALES TO 1,000 MALES					
	1901		1891		1891	
	Actual Population	Natural Population	Actual Population	Natural Population.	Actual Population	Natural Population
1.	2.	3	4	5	6.	7
India	963	964	958	959	954	976
Ajmer-Merwara	900	876	881	893	851	773
Assam	949	973	942	966	950	965
Bengal	998	1,008	1,005	1,009	1,008	1,011
Berar	975	988	942	971	936	958
Bombay	945	950	938	946	938	917
Burma	962	1,027	962	1,017	877	990
Central Provinces	1,031	1,035	996	1,003	982	989
Coorg	801	963	804	954	775	939
Madras	1,025	1,017	1,020	1,014	1,020	1,019
N.-W. F. Province and Punjab	852	819	851	848	843	844
United Provinces	937	926	930	917	925	914
Baroda State	930	970	928	929	917	890
Central India Agency	948	954	912	921	897	903
Hyderabad State	964	970	961	971	968	974
Kashmir State	884	887	880	887	...	
Mysore State	980	994	991	1,000	1,007	1,008
Rajputana Agency	905	901	891	883	852	843

* Note.—The proportions for Provinces include the Native States attached to them. In calculating the proportion of females in the natural population, emigrants from India to the Straits Settlements, Ceylon and other places have not been taken into account. The effect of doing so, so far as information is available, would be to reduce the proportion of females per 1,000 males in India as a whole to 963 in 1901, and to 958 in 1891.

SUBSIDIARY TABLE II.

Number of females to 1,000 males at each age period in India, as a whole and in certain provinces at the last two Censuses.

All Religions.

Age	NUMBER OF FEMALES TO 1,000 MALES IN									
	India		Bengal		United Provinces of Agra and Oudh		Madras.		Bombay.	
	1901	1891	1901	1891	1901	1891	1901	1891	1901	1891
1	2	3	4	5	6	7	8	9	10.	11.
0—1	998	1 020	1,018	1,055	967	976	1,041	1 048	974	1,002
1—2	1,035	1,038	1,093	1,079	1,025	1,036	1,051	1,065	1,035	1,064
2—3	1,042	1,063	1,102	1,110	1,014	1,057	1,058	1,063	1 037	1,070
3—4	1,059	1,068	1,114	1,120	1,023	1,038	1,087	1 061	1,034	1,066
4—5	1,010	1,001	1,036	1,039	987	994	1,040	1 029	989	987
Total 0—5	1,028	1,038	1,071	1,081	1,000	1,020	1,051	1,052	1,013	1,033
5—10	955	936	977	951	912	904	1,003	990	957	919
10—15	824	795	812	803	801	750	902	871	810	773
15—20	929	930	1,046	1,031	829	812	944	967	892	894
20—25	1,092	1,071	1,176	1,187	1,001	975	1,248	1,214	1,038	1,032
25—30	980	989	1 009	1,072	948	902	1,120	1,077	913	911
Total 0—30	960	957	1 001	1,002	913	905	1,027	1,021	933	931
30—35	967	962	979	1,021	950	948	1,121	1,093	925	916
35—40	882	867	883	882	938	896	892	874	845	822
40—45	969	940	980	982	977	956	1,034	1,010	961	931
45—50	882	845	888	878	899	874	874	853	880	835
50—55	977	993	1,040	1,049	984	995	1,061	1,100	993	971
55—60	919	908	1,000	1,013	986	917	876	907	862	850
60 and over	1,119	1,187	1,266	1,307	1,165	1,194	1,175	1,217	1 167	1,167
Total	963	978	1,000	1,007	937	930	1 02	1,023	937	930

Age	NUMBER OF FEMALES TO 1,000 MALES IN							
	Panjab		Burma		Central Provinces		Assam.	
	1901	1891	1901	1891	1901	1891	1901	1891.
1	2	3	4	5	6	7	8	9
0—1	931	971	1,065	1,063	983	1,014	1,016	1,022
1—2	946	929	1 032	1,031	1,034	1,082	1,039	1 050
2—3	916	951	1,036	1,022	1,023	1,100	1 062	1,065
3—4	954	907	1,013	1 007	1,037	1,131	1,062	1,062
4—5	915	864	1,014	1,016	1,047	1,049	1 020	1,093
Total 0—5	931	926	1,030	1,028	1,036	1,077	1 041	1,046
5—10	859	815	1,001	997	1,007	978	978	978
10—15	750	738	921	926	883	830	811	801
15—20	792	887	1 058	1,078	951	948	1,113	1,074
20—25	918	869	1,006	962	1,151	1,176	1,222	1,155
25—30	889	906	907	882	1,060	1,083	986	990
Total 0—30	854	866	988	981	1,006	1,005	1,008	996
30—35	895	791	840	823	1,016	977	883	909
35—40	937	921	813	816	1,007	945	707	709
40—45	904	789	888	894	1,044	891	835	842
45—50	823	855	875	883	1,089	843	739	705
50—55	854	705	992	1,036	1,123	958	898	850
55—60	748	830	982	1,004	1,159	1,049	804	755
60 and over	834	774	1,131	1,161	1,470	1,289	1,008	1,012
Total	858	854	962	962	1,034	998	949	942

NOTE —In this Table Native States have been left out of account.

SUBSIDIARY TABLE II—*contd.*

Number of females to 1,000 males at each age period in India as a whole and in certain provinces at the last two Censuses.

Hindu.

Age	NUMBER OF FEMALES TO 1,000 MALES IN							
	India		Bengal		United Provinces of Agra and Oudh		Madras	
	1901	1891	1901	1891	1901	1891	1901	1891
1	2	3	4	5	6	7	8	9
0-1	999	1,019	1,023	1,050	961	973	1,043	1,049
1-2	1,039	1,047	1,097	1,079	1,029	1,037	1,054	1,069
2-3	1,015	1,071	1,105	1,124	1,014	1,057	1,063	1,068
3-4	1,067	1,079	1,118	1,133	1,021	1,057	1,070	1,064
4-5	1,015	1,006	1,034	1,041	984	990	1,043	1,032
Total 0-5	1,033	1,044	1,073	1,086	999	1,019	1,055	1,055
5-10	958	942	980	959	910	900	1,011	991
10-15	826	795	820	813	798	748	902	870
15-20	906	908	1,005	985	820	803	934	960
20-25	1,085	1,066	1,122	1,127	995	968	1,245	1,214
25-30	981	986	999	1,062	945	954	1,120	1,077
Total 0-30	958	955	991	994	909	901	1,027	1,021
30-35	979	971	991	1,029	946	945	1,122	1,094
35-40	902	879	934	935	937	898	893	875
40-45	983	948	1,004	997	973	951	1,039	1,009
45-50	897	855	931	924	898	872	875	854
50-55	1,014	1,004	1,060	1,062	983	980	1,064	1,104
55-60	932	924	1,052	1,051	938	917	880	909
60 and over	1,207	1,229	1,380	1,382	1,186	1,208	1,182	1,222
Total	969	962	1,007	1,013	935	927	1,029	1,024

Age.	NUMBER OF FEMALES TO 1,000 MALES IN							
	Bombay		Punjab		Central Provinces		Assam	
	1901	1891	1901	1891	1901	1891	1901	1891
1	2	3	4	5	6	7	8	9
0-1	1,002	1,012	927	979	979	1,015	1,005	1,021
1-2	1,049	1,069	932	921	1,031	1,078	1,032	1,056
2-3	1,044	1,078	892	957	1,021	1,096	1,060	1,058
3-4	1,076	1,085	951	902	1,036	1,130	1,063	1,069
4-5	1,025	1,003	905	851	1,014	1,042	1,032	1,033
Total 0-5	1,040	1,046	921	925	1,033	1,073	1,037	1,046
5-10	970	938	865	849	1,005	975	977	981
10-15	828	794	737	725	878	827	799	775
15-20	920	923	764	854	942	937	1,040	993
20-25	1,098	1,066	859	848	1,149	1,174	1,171	1,056
25-30	939	928	847	889	1,058	1,076	968	968
Total 0-30	957	951	837	854	1,002	1,000	989	972
30-35	952	940	868	766	1,017	974	860	899
35-40	872	851	823	902	1,007	945	685	714
40-45	1,001	952	881	758	1,047	897	801	825
45-50	899	855	798	853	1,037	845	735	705
50-55	1,029	1,000	857	879	1,117	963	894	843
55-60	871	876	712	870	1,112	1,044	804	757
60 and over	1,227	1,225	879	797	1,457	1,293	1,046	1,026
Total	955	952	841	843	1,031	996	929	923

SUBSIDIARY TABLE II—*contd.*

Number of females to 1,000 males at each age period in India as a whole and in certain provinces at the last two Censuses.

Musalman.

NUMBER OF FEMALES TO 1,000 MALES IN									
AGE	India		Bengal		United Provinces of Agra and Oudh		Madras.		
	1901	1891	1901	1891	1901	1891	1901.	1891	
1	2	3	4	5	6	7	8	9	
0-1	987	1,020	1,010	1,005	993	997	1,018	1,086	
1-2	1,027	1,022	1,085	1,082	1,003	1,028	1,009	1,080	
2-3	1,036	1,045	1,097	1,090	1,011	1,059	1,004	1,012	
3-4	1,046	1,040	1,108	1,099	1,031	1,070	1,024	1,011	
4-5	991	983	1,037	1,034	998	1,026	986	995	
Total 0-5	1,016	1,022	1,067	1,073	1,007	1,034	1,007	1,016	
5-10	938	912	970	937	928	924	987	974	
10-15	794	768	791	777	818	767	902	870	
15-20	970	986	1,126	1,119	886	868	1,014	1,024	
20-25	1,115	1,099	1,282	1,313	1,057	1,049	1,270	1,282	
25-30	974	996	1,023	1,089	994	1,014	1,155	1,104	
Total 0-30	956	955	1,015	1,016	941	939	1,028	1,020	
30-35	928	932	950	998	977	977	1,129	1,102	
35-40	809	817	781	770	945	893	877	861	
40-45	926	922	931	951	1,007	988	1,092	1,068	
45-50	813	808	788	772	906	891	877	867	
50-55	939	957	1,007	1,029	987	1,031	1,108	1,117	
55-60	845	844	872	913	922	927	826	856	
60 and over	991	1,053	1,104	1,167	1,063	1,124	1,151	1,207	
Total	937	940	984	993	957	956	1,031	1,025	

NUMBER OF FEMALES TO 1,000 MALES IN								
AGE	Bombay		Punjab		Central Provinces		Assam	
	1901	1891	1901	1891	1901	1891	1901	1891
1	2	3	4	5	6	7	8	9
0—1	899	957	954	983	963	1,001	1,023	1,018
1—2	979	1,042	979	959	916	1,022	1,043	1,038
2—3	1,010	1,034	947	968	987	1,040	1,047	1,081
3—4	916	996	975	926	986	1,077	1,073	1,074
4—5	881	929	935	888	1,055	1,070	1,019	1,025
Total 0—5	929	981	956	946	984	1,044	1,040	1,048
5—10	906	845	870	854	973	1,001	987	987
10—15	731	690	704	754	867	793	763	777
15—20	801	795	831	923	896	854	1,184	1,155
20—25	893	974	973	903	1,013	1,004	1,250	1,225
25—30	802	830	937	925	940	953	935	971
Total 0—30	858	970	883	888	945	947	1,001	1,004
30—35	857	858	916	809	903	912	847	873
35—40	767	721	849	938	848	792	645	633
40—45	844	879	919	821	1,024	933	816	827
45—50	829	778	943	872	942	719	675	634
50—55	880	881	858	745	1,129	992	903	879
55—60	846	745	796	815	1,014	809	680	690
60 and over	994	998	825	775	1,261	1,273	895	1,000
Total	857	863	877	874	962	944	936	943

SUBSIDIARY TABLE II—*contd.*

Number of females to 1,000 males at each age period in India as a whole and in certain provinces at the last two Censuses.

Christian.

Age	NUMBER OF FEMALES TO 1,000 MALES IN							
	India.		Bengal		United Provinces of Agra and Oudh		Madras	
	1901.	1891	1901	1891	1901	1891	1901	1891
1	2	3	4	5	6	7	8	9
0-1	1,056	1,059	1,021	1,039	1,069	1,036	1,036	1,038
1-2	1,059	1,075	1,065	995	925	1,149	1,059	1,050
2-3	1,051	1,042	1,056	994	1,077	994	1,018	1,039
3-4	1,061	1,051	1,098	1,053	1,025	964	1,050	1,034
4-5	1,027	1,035	1,031	1,063	1,099	1,009	1,027	1,009
Total 0-5	1,050	1,051	1,055	1,021	1,045	1,013	1,036	1,033
5-10	989	992	1,015	972	892	906	1,012	1,004
10-15	907	905	865	868	786	868	937	918
15-20	979	969	997	922	877	808	1,017	1,035
20-25	940	799	995	936	428	210	1,262	1,199
25-30	831	816	843	913	400	298	1,139	1,098
Total 0-30	956	929	965	947	677	528	1,043	1,035
30-35	918	901	889	899	741	579	1,124	1,092
35-40	817	789	841	822	850	661	934	894
40-45	900	869	848	852	882	793	1,031	1,006
45-50	823	788	885	763	717	660	892	859
50-55	922	929	866	908	819	714	1,030	1,061
55-60	849	881	910	949	929	797	845	939
60 and over	1,013	1,045	1,115	1,132	916	746	1,066	1,125
Total	935	913	946	930	721	567	1,033	1,026

Age	NUMBER OF FEMALES TO 1,000 MALES IN									
	Bombay.		Punjab		Burma		Central Provinces		Assam	
	1901.	1891	1901	1891	1901	1891	1901	1891	1901.	1891
1	2.	3.	4	5	6	7	8	9	10	11
0-1	985	1,053	946	897	1,057	1,009	909	808	1,000	1,117
1-2	1,066	1,046	854	975	1,076	1,061	922	1,041	1,067	970
2-3	1,039	1,027	999	923	1,036	978	936	1,073	1,017	1,145
3-4	1,081	1,061	991	975	961	1,013	1,172	994	1,184	918
4-5	991	1,037	967	993	1,045	1,015	962	932	1,037	1,157
Total 0-5	1,030	1,045	955	950	1,032	1,012	980	960	1,056	1,061
5-10	986	978	904	860	985	942	1,098	1,044	931	1,019
10-15	896	800	794	854	898	864	913	880	877	918
15-20	788	686	814	608	1,021	1,058	933	1,004	1,210	1,181
20-25	570	416	243	131	888	759	586	317	1,142	950
25-30	517	437	223	240	772	674	470	381	933	852
Total 0-30	774	677	498	388	934	878	813	647	1,011	991
30-35	673	613	560	479	753	652	793	611	845	655
35-40	638	591	703	603	674	637	658	577	679	644
40-45	740	594	667	551	765	741	828	732	812	787
45-50	661	548	698	571	727	753	749	601	699	580
50-55	742	628	693	505	861	904	895	761	881	663
55-60	693	704	828	706	896	752	916	742	688	753
60 and over	845	920	767	778	870	867	977	942	1,143	1,110
Total	748	690	538	420	878	830	808	654	948	890

SUBSIDIARY TABLE II—*concl'd.*

Number of females to 1,000 males at each age period in India as a whole and in certain provinces at the last two Censuses.

Animist.

AGE	NUMBER OF FEMALES TO 1,000 MALES IN							
	India		Bengal		Madras.		Bombay	
	1901	1891	1901	1891	1901	1891	1901	1891.
1	2	3	4	5	6	7	8	9
0—1	1,085	1,044	1,031	1,056	1,064	1,059	997	1,020
1—2	1,061	1,076	1,085	1,067	1,062	988	1,048	1,098
2—3	1,088	1,107	1,114	1,110	1,088	1,060	1,057	1,120
3—4	1,115	1,120	1,150	1,129	1,098	1,121	1,120	1,067
4—5	1,060	1,058	1,056	1,062	1,084	1,042	1,311	1,024
Total 0—5	1,074	1,083	1,092	1,089	1,082	1,062	1,138	1,059
5—10	984	947	993	953	959	926	1,034	927
10—15	884	836	886	879	857	852	851	958
15—20	1,046	1,017	1,075	1,074	1,089	992	1,110	938
20—25	1,209	1,205	1,277	1,245	1,284	1,153	1,292	1,188
25—30	1,050	1,082	1,077	1,121	1,005	903	1,016	997
Total 0—30	1,025	1,008	1,039	1,028	1,023	968	1,046	965
30—35	999	996	1,056	1,102	1,032	1,002	1,030	906
35—40	939	909	1,018	994	847	826	860	880
40—45	930	860	997	980	727	778	897	865
45—50	957	856	1,019	937	796	711	905	823
50—55	994	916	969	965	794	730	1,299	927
55—60	1,089	1,025	1,062	1,122	883	864	931	777
60 and over	1,233	1,157	1,233	1,190	1,002	892	1,335	980
Total	1,016	991	1,041	1,031	969	927	1,031	939

AGE	NUMBER OF FEMALES TO 1,000 MALES IN							
	Burma		Central Provinces		Assam			
	1901	1891	1901	1891	1901	1891	1901	1891
1	2	3	4	5	6	7	8	9
0—1	1,089	975	1,023	1,016	1,038	1,032	1,032	1,032
1—2	1,009	1,023	1,091	1,093	1,051	1,051	1,051	1,051
2—3	1,009	1,000	1,040	1,130	1,087	1,057	1,057	1,057
3—4	988	918	1,114	1,144	1,042	1,040	1,040	1,040
4—5	1,017	968	1,065	1,086	1,040	1,044	1,044	1,044
Total 0—5	1,014	971	1,067	1,161	1,052	1,045	1,045	1,045
5—10	951	945	1,024	989	969	952	952	952
10—15	882	848	917	859	943	935	935	935
15—20	945	1,009	1,027	1,088	1,264	1,241	1,241	1,241
20—25	936	1,013	1,221	1,268	1,397	1,324	1,324	1,324
25—30	899	875	1,124	1,173	1,173	1,124	1,124	1,124
Total 0—30	942	941	1,047	1,047	1,087	1,084	1,084	1,084
30—35	815	673	1,042	1,015	1,036	1,018	1,018	1,018
35—40	741	653	1,062	993	887	806	806	806
40—45	801	743	1,032	854	946	928	928	928
45—50	746	686	1,099	870	848	807	807	807
50—55	885	806	1,168	927	915	843	843	843
55—60	859	756	1,345	1,167	958	831	831	831
60 and over	1,027	880	1,661	1,270	1,057	990	990	990
Total	899	858	1,074	1,028	1,041	1,009	1,009	1,009

SUBSIDIARY TABLE III.

Number of female, per 100 male, births.

PROVINCE	NUMBER OF FEMALES BORN TO 100 MALES IN											Total 1891 1900
	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900		
1	2	3	4	5	6	7	8	9	10	11	12	
Assam	92	93	92	93	93	93	92	93	94	94	93	
Bombay	93	93	92	93	93	93	92	92	93	92	93	
Bengal	91	92	93	94	94	94	94	94	94	95	94	
<i>Bengal Proper</i>	90	92	93	94	94	94	93	94	94	94	91	
<i>Bihar</i>	90	91	93	94	94	94	94	94	95	95	94	
<i>Orissa</i>	96	91	93	94	94	94	95	91	95	96	94	
<i>Chota Nagpur</i>	93	94	95	95	95	95	95	91	97	96	95	
United Provinces	91	91	91	91	92	92	92	93	93	93	92	
Madras	96	96	96	96	96	95	96	96	96	96	96	
Central Provinces	94	93	94	94	95	93	93	94	95	95	94	
Punjab	88	88	89	89	90	91	90	91	91	90	90	
Burma	94	93	93	94	93	94	93	92	92	93	93	
India	92	92	93	93	93	93	93	93	94	94	93	

SUBSIDIARY TABLE IV.

Number of female, per 100 male, deaths.

PROVINCE	NUMBER OF FEMALE DEATHS PER 100 MALES IN											Total 1891 1900
	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900		
1	2	3	4	5	6	7	8	9	10	11	12	
Assam	89	90	86	88	88	88	91	86	85	89	88	
Bombay	92	93	92	92	92	91	90	90	89	87	90	
Bengal	89	88	89	88	87	85	84	85	88	88	87	
<i>Bengal Proper</i>	90	88	89	89	88	86	85	86	89	87	89	
<i>Bihar</i>	87	87	88	87	83	84	82	83	87	90	86	
<i>Orissa</i>	94	95	94	96	93	89	91	92	93	94	93	
<i>Chota Nagpur</i>	68	90	89	91	89	87	83	87	87	85	87	
United Provinces	87	87	88	89	88	85	86	91	91	90	88	
Madras	95	95	95	95	95	95	94	91	97	95	95	
Central Provinces	87	86	85	87	86	84	80	88	84	83	84	
Punjab	87	91	88	91	89	91	95	93	93	95	91	
Burma	81	79	81	82	83	83	79	77	78	78	80	
India	89	89	89	90	88	87	87	89	90	89	89	

SUBSIDIARY TABLE V.

Number of females per 1,000 males in certain selected castes in the main Provinces.

Caste	Number of females to 1,000 males	Caste	Number of females to 1,000 males	Caste	Number of females to 1,000 males	Caste	Number of females to 1,000 males
BENGAL.		UNITED PROVINCES.		MADRAS.		BOMBAY.	
Provincial average.	998	Provincial average.	937	Provincial average.	1,025	Provincial average	945
Ahm and Goala	979	Ahm . . .	937	Bahya	1,007	Agri . . .	950
Babhan	999	Bania . . .	924	Brahman . . .	1,022	Balnohi . . .	828
Bagdi . . .	1,024	Brahmap . . .	923	Chakkiliyan . . .	1,014	Blul . . .	980
Brahman	987	Chaman . . .	986	Golla . . .	1,000	Brahman . . .	916
Chaman . . .	1,024	Dhobi . . .	945	Idaiyan . . .	1,042	Chambhar or Moohi . .	959
Chasa . . .	1,016	Gadaria . . .	897	Kamma . . .	994	Dhangar . . .	974
Dosadh . . .	1,039	Jat . . .	852	Kammalan . . .	1,022	Lingayat . . .	985
Hajjum and Napit .	1,005	Jolaha . . .	982	Kapu . . .	1,009	Koli . . .	950
Jolaha . . .	1,074	Kachhi . . .	897	Madiga . . .	987	Kumbhar . . .	990
Karibatta (Chisri) .	1,008	Kahai . . .	952	Mala . . .	1,024	Kunbi . . .	990
Kayastha . . .	1,003	Koni . . .	910	Mappilla . . .	997	Mahar, Holia or Dhed	1,006
Khandait . . .	1,042	Kumhar . . .	931	Native Christian . .	1,040	Mali . . .	998
Kori . . .	1,027	Kurmi . . .	970	Odde . . .	994	Mang or Mading . .	1,016
Kurmi . . .	1,013	Lodha . . .	899	Pallan . . .	1,077	Maratha . . .	983
Nama Sudra . . .	989	Murao . . .	938	Palli . . .	1,034	Rajput . . .	919
Rajbansi (koch) . .	936	Nai . . .	926	Paraiyan . . .	1,066	Sama . . .	831
Rajput . . .	971	Pasi . . .	973	Shanán . . .	1,023	Shekh . . .	919
Santal . . .	1,008	Pathan . . .	956	Shekh . . .	1,023	Soni . . .	953
Tanti and Tatwa . .	1,000	Rajput . . .	887	Tiyan . . .	1,025	Sunar . . .	956
Teli . . .	1,017	Shekh . . .	962	Vellala . . .	1,030	Vani . . .	903
PUNJAB AND NORTH-WEST FRONTIER PROVINCE.		CENTRAL PROVINCES.		BURMA.		ASSAM.	
Provincial average	852	Provincial average.	1,031	Provincial average.	962	Provincial average.	940
Ardin . . .	877	Ahm . . .	1,106	Akha . . .	913	Ahom . . .	961
Aroia . . .	842	Brahman . . .	925	Arakanese . . .	1,004	Brahman . . .	812
Awán . . .	873	Chaman . . .	1,048	Burmese . . .	1,039	Chutiya . . .	957
Biloch . . .	849	Dhumar . . .	1,052	Chin . . .	1,014	Das * . . .	967
Brahman . . .	838	Ganda . . .	1,040	Chinese . . .	324	Garo . . .	988
Chamái . . .	870	Gond . . .	1,073	Danu . . .	1,009	Jugi . . .	989
Chuhra . . .	860	Kalar . . .	1,034	Hkun . . .	1,032	Kachari . . .	954
Fakri . . .	736	Kandh . . .	1,036	Intha . . .	1,058	Karibatta . . .	944
Gujar . . .	839	Kewat . . .	1,081	Kachin . . .	1,032	Kalita . . .	913
Jat . . .	804	Koshti . . .	991	Kadu . . .	1,094	Kajastha . . .	863
Jhinwari . . .	859	Kunbi . . .	1,013	Kami . . .	886	Khasi . . .	1,118
Julaha . . .	866	Kurmi . . .	1,035	Karen . . .	977	Khatri . . .	1,013
Kanet . . .	924	Lodhi . . .	1,028	Palaung . . .	976	Kotch . . .	970
Khatti . . .	797	Lohar . . .	1,031	Shan . . .	1,037	Meeh . . .	1,001
Kumhar . . .	879	Mali . . .	994	Sinense . . .	836	Mikir . . .	973
Moohi . . .	883	Mehra . . .	1,038	Talaing . . .	951	Nadiyal . . .	958
Nai . . .	862	Nu . . .	1,024	Taungthu . . .	1,048	Naga . . .	1,022
Pathán . . .	875	Rajput . . .	1,034			Namasudra . . .	957
Rajput . . .	861	Sawari . . .	1,063			Rajbansi . . .	965
Tarkhan . . .	859	Teli . . .	1,044			Shekh . . .	941

* Includes Halwa Das, Sudra Das and Sudra

CHAPTER IV.

Infirmities.

General Remarks.

228. The infirmities regarding which information was collected at the census were the same as on previous occasions, *viz.*, unsoundness of mind, deaf-mutism, blindness, and leprosy * The instructions issued to the enumerators were practically identical with those of previous censuses, and were as follows. —

If any person be blind of both eyes, or deaf and dumb from birth, or insane, or suffering from corrosive leprosy, enter the name of the infirmity in this column. Do not enter those who are blind of one eye only, or who have become deaf and dumb after birth, or who are suffering from white leprosy only.

229. In considering the statistics thus collected, it must be borne in mind that they were recorded, not by experts, but by the villagers who served as enumerators, whose education was, as a rule, of a very low order, and that in the case of each infirmity there is a considerable risk of error in the diagnosis. As regards unsoundness of mind, the main difficulty is in regard to cretins and persons who are merely weak-headed, or whose mental derangement is of a purely temporary character. The tendency at each succeeding census is to be more and more rigid in excluding such persons from the category of the insane, but this tendency is not universal, and in Mysore, at the present census, no less than 12 per cent of the persons returned as insane were also shown as working at some occupation and earning their own livelihood. Unless special care is taken to prevent it the figures for congenital deaf-mutism are in danger of being vitiated by the inclusion of persons who are merely deaf on account of old age, or who have acquired their infirmity by illness or accident after birth. In the return of the blind, there is the possibility of persons being thus returned merely because their vision has grown dim on account of old age, or because they have lost the sight of one eye only. In the case of leprosy there is a danger of the entry as lepers of persons who are suffering from some syphilitic taint or from leucoderma, *i.e.*, what is commonly called white leprosy, an affection which, though sufficiently striking on the dark skin of a native of India, does not, of course, partake in any way of the nature of true leprosy. The Leprosy Commission found that of the persons produced before them as lepers by Police Inspectors and other non-medical men, about ten per cent. were suffering from diseases other than true leprosy. The error must be still greater when the diagnosis is made by the simple villagers from whose ranks most of our enumerators were drawn. It is thus apparent that in the case of all infirmities there is a tendency to make entries which are not contemplated by the instructions, and these can only be eliminated by careful instruction and supervision. The accuracy of the return, therefore, depends in a great measure on the extent to which the work of the enumerators is checked by the higher classes of census officers.

Apart from errors of diagnosis or compilation there may be omissions due to wilful concealment. In this country, however, the existence of blindness, insanity or deaf-dumbness inspires pity rather than contempt, and there would, as a rule, be no desire to conceal these infirmities except perhaps in the case of young women or of children whose defects the parents themselves are unwilling to recognise so long as there is any possibility of their proving to be only temporary. Moreover, the census returns are for the most part prepared, not by the head of the family, but by enumerators who are ordinarily residents of the villages in which they are employed. Females of child-bearing age are kept in comparative seclusion, but the other villagers mix freely together, and the enumerator would generally be personally cognizant of the existence of infirmities even if the persons concerned were not disposed to mention them. It is only in the case of leprosy that any shame is held to attach to the sufferer, and concealment may, perhaps, have been attempted on a larger scale, especially in the case of females and persons belonging to the more respectable castes. The latter, however, suffer less frequently from the disease than their low-caste neighbours, and in any case they form but a small proportion of the total population.

* In Travancore statistics were also collected regarding elephantiasis.

Variation
since 1891

230 The total number of persons suffering from each infirmity, as recorded

Infirmity	Total afflicted		
	1901		1891
Insane . . .	66,205	74,279	81,182
Deaf-mute . . .	153,168	196,861	197,215
Blind . . .	354,104	458,868	526,748
Leper . . .	97,340	126,214	131,968
TOTAL	670,817	856,252	937,063

at each of the last three enumerations, is noted in the margin. The most striking feature of the figures is the progressive diminution in the number of the afflicted, which is common to all parts of India. The decline in 1891 was attributed at the time by general consent to a more accurate enumeration, i.e., to the exclusion from the returns of persons whose infirmities, whatever

they might be, did not fall within the scope of the definition laid down in the instructions to the enumerators. On the present occasion also there can be little doubt that the result is due, in part, to the same cause. Thanks to the experience gained in the past, the arrangements for the training of the enumerators were more elaborate in 1901 than they had ever been before and the scrutiny of the schedules was far more thorough. It is thus only natural that the elimination of erroneous entries should have been more complete than it was even ten years earlier. At the same time, the difference due to greater accuracy cannot have affected the comparative result at the present census to the same extent as on the previous occasion, and the decrease due to this cause must, it would seem, be less than it was then. The actual decrement, however, is more than 185,000 or 21 per cent. compared with 81,000 or 8·6 per cent. in 1891. It would seem therefore that at least 13 per cent. of the registered decline represents a genuine diminution in the number of afflicted persons.

The reasons for this will be discussed in detail for each infirmity separately, but it will be convenient to summarise here such of the main causes as appear to be of general application. It seems obvious that the long period of peace and growing material prosperity which the country has enjoyed under British rule, coupled with the spread of education, the greater attention paid to sanitation and, above all, the larger amount of medical relief afforded at the public hospitals and dispensaries, the number of which is constantly growing, must have combined to bring about an improvement in the general health of the people and to reduce the number of the afflicted.

231. There is, however, another and less pleasing reason for the unusually great reduction recorded on the present occasion. The majority of the persons suffering from the infirmities dealt with at the census belong to the lowest grades of society, and many of them subsist by begging. When the stress of famine comes, the springs of private benevolence dry up. Every effort is made by Government to supply food to all who, like most of those whose infirmities are recorded at the census, are incapable of earning their living, but these are of all people the most difficult to find and relieve. Even in ordinary years the alms they receive are often barely sufficient to keep body and soul together, and they are at the best of times of inferior physique, they are less fitted than their neighbours to resist the strain which famine brings upon them. It is to be feared, therefore, that the mortality amongst the unfortunate people has, in many parts, been exceptionally high during the last ten years, but it is impossible to gauge, with any pretence to accuracy, the extent to which this has influenced the figures. The Superintendent of the Bombay Census, who records a phenomenal all-round decrease, attributes it mainly to the effects of the famine, but the Central Provinces, though famine wrought greater havoc there, shows a far less noticeable diminution in the proportion of afflicted persons. Moreover, the general decline in the Bombay Presidency was shared by Sind which did not suffer from famine.

232. It may be asked how far the result is due to the change in the system of abstracting and compiling the results of the census described in the Introduction. The answer is that, generally speaking, there is no reason for supposing that this has affected the figures to any appreciable extent. In two of the largest provinces, both of which contribute to the general falling-off, the tabulation of infirmities was carried out on the old system, but, with greater care than in 1891, and in several others, where the decline was very marked, the work was

checked without any material change in the figures. But in the Rajputana Agency and the Hyderabad State the results now obtained differ so greatly from those of the last enumeration and also from the corresponding figures for adjoining tracts at the present census that it would be unsafe at present to draw any inferences from them, for these tracts the figures for 1911 must be awaited.

233. Of the total number of persons afflicted about half are blind and a quarter are deaf-mutes, one in seven is a leper and one in ten a lunatic. The proportions vary in different parts; in the Punjab three-quarters of the total are blind, while in Assam the lepers, and in Burma the insane, account for a considerably larger proportion than they do elsewhere. Relative prevalence of each infirmity

The statistics collected regarding infirmities are embodied in Imperial Tables XII and XIIA. At the end of this chapter subsidiary tables will be found showing— Subsidiary Tables

- (I) the proportion borne by the persons suffering from each infirmity to the total afflicted, and the number of females to 100 males in each province and state;
- (II) the number of persons afflicted in each province and state per 100,000 of the population at each of the last three censuses,
- (III) the number of persons afflicted per 100,000 of the population at each age-period, and the number of females afflicted to 1,000 males,
- (IV) the census statistics of the insane compared with those of the lunatic asylums in certain provinces,
- (V) the distribution of 10,000 persons of each infirmity by age,
- (VI) the distribution of the insane by main age-periods in each province and state;
- (VII) the actual variation in the number of the blind at each age-period in some of the main provinces;
- (VIII) the proportion of the deaf-mute population returned at the higher ages in each province and state.

Insanity.

234 The discussion of the return of the insane is complicated by the difficulty of gauging the extent to which cretins, *i.e.*, the congenitally weak-minded, have been included. The vernacular terms used in the instructions to the enumerators had not always the same signification, in some provinces they may have been wide enough to include all cases of mental affliction, corresponding fairly well to the English phrase "of unsound mind," but ordinarily, in their strict sense, they referred more especially to the insane, and although they might be used loosely to include imbeciles also, the tendency would be to exclude the latter from the account, and as the checking of the schedules becomes more and more comprehensive, cretins enter into the total to a constantly diminishing extent. Deaf-muteness and cretinism are closely associated, but the number of persons returned as 'insane' who were also entered as deaf-mute was very small. In several provinces where statistics for combined infirmities were compiled, the proportion of the 'insane' who were returned as deaf-mute ranged from 1.5 to 2.9 per cent, which is far less than it would have been if cretins had been included to any great extent*. The same conclusion is indicated by the age distribution of the insane as shown in the diagram in the margin of paragraph 241. Cretinism is from birth, but the proportion of persons returned as insane at the lower ages is relatively small. The general conclusion is therefore that in the figures for India as a whole cretinism does not enter very largely into the return. In some provinces and states it does so to a greater extent than in others, but this point will be reverted to when discussing the distribution of the persons thus afflicted according to locality. Meaning of the figures.

235. In comparison with European countries mental disease would appear to be comparatively rare in India. In England there are about 13 persons of unsound Comparison with other countries.

* It is possible that where a person was of unsound mind and also deaf-mute, in the absence of special instructions, the enumerators often contented themselves with entering him under only one of the two heads. It is also possible that sufficient care may not always have been taken in the course of tabulation to provide for a complete record of dual infirmities. These matters are deserving of consideration when the time comes for making arrangements for the Census of 1911. It would then also be desirable to enquire whether imbeciles could not be distinguished from the insane properly so called. The attempt was made without success in 1872, but at that time census-taking in India was in its infancy. In some places, at least, there are special names for cretin, such as *sumád* or *adhpaal* in Bengal and *bok* in the United Provinces. In any case the precise local meaning of the words used to indicate mental unsoundness should be carefully enquired into.

mind to one in India. That is due partly to the fact that in Europe many persons who suffer from imbecility or from other harmless manifestations of mental disease, or whose attacks are periodical, are included, whereas in India we have seen that they are not usually taken into consideration; but the main reason is doubtless to be found in the very different conditions of life in the East. In Europe the competition between man and man is severe, and is yearly becoming more so. The mental wear and tear is very great, and the strain on the nervous system deranges many feeble intellects which in the calm and placid East would escape the storms to which they succumb.

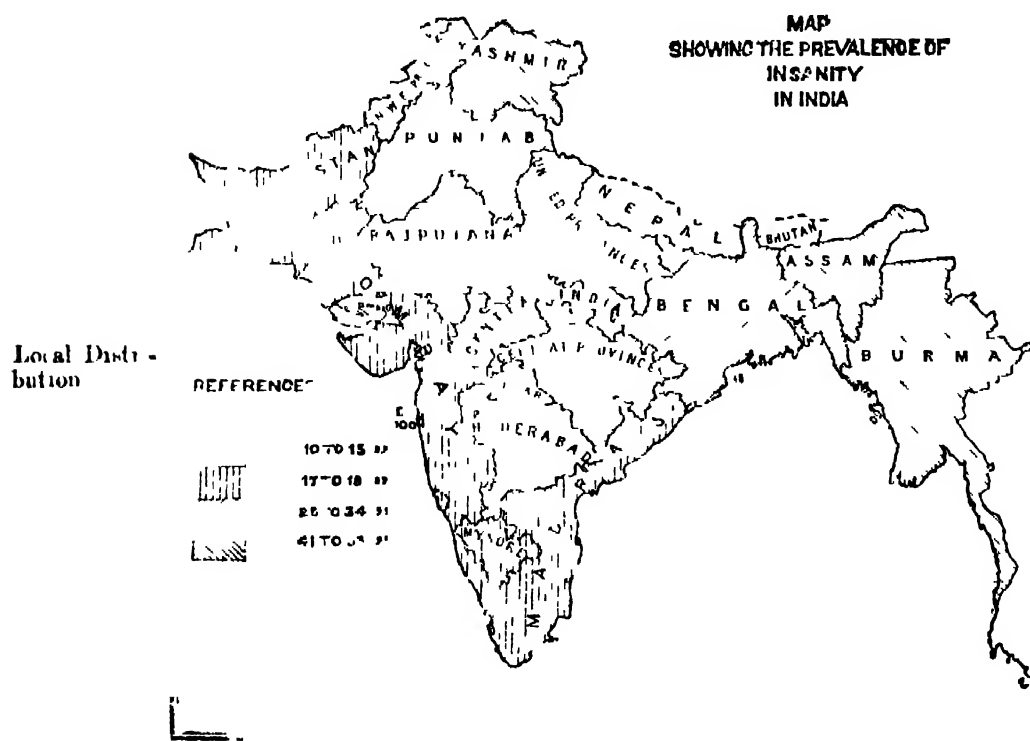
Comparison
with 1891

236 The total number of the insane is less by nearly 11 per cent than it was in 1891, when a decrease of more than 8 per cent was registered as compared with 1881. The age distribution shows that whereas in 1891 a considerable part of the decrease was due to a diminution at the earlier ages, *i.e.*, to the omission of cretins, on the present occasion this accounts for only a small part of the difference, and the general age distribution is much the same now as it was ten years ago. In these circumstances the greater accuracy of the more recent enumeration, so far as it is due to the omission of cretins, does not carry us very far towards accounting for the falling off. It is possible, however, that cases of temporary aberration may have been more sparingly entered than was the case at the previous census, and in Sind Mr. Enthoven is disposed to account for the high reported ratio of insanity in 1891 on the supposition that the delirium due to malarial fever, then very prevalent, was not unfrequently mistaken by the enumerators for insanity.

The decline now noticed is common to practically the whole of India; the only noteworthy exceptions are (a) the United Provinces, where the figure in 1891 was extraordinarily low, and where, even now, the proportion of the afflicted is only half what it is in Bengal, and (b) the Punjab, which now shows a considerably higher prevalence of insanity than Bengal. No reason seems to be forthcoming for the increase in the Punjab, but it does not appear to be due in any way to confusion with deaf-mutism, and the variations are not marked by corresponding changes in the figures for that infirmity. The greatest decline is in Bombay, where the proportion of the insane in 1891 was greater by 50 per cent than that at the present enumeration. To some extent this result may be due to better diagnosis, but the main reason seems to be that the insane suffered far more than the general population in the years of scarcity of food. Mr. Enthoven holds that this explanation is confirmed by the fact that the decrease is even greater in the native states than it is in British territory. In Bengal, the Central Provinces and Berar, the decline is also ascribed in part to the privations of famine; in Madras, it is suggested that it is due partly to the treatment of

pre-disposing diseases in hospitals and to the cure of lunatics in Asylums, and in Assam the general unhealthiness of the decade is said to have caused an unusually heavy rate of mortality amongst persons mentally afflicted.

237. The amount of insanity varies greatly in different parts of India. According to the returns it is most prevalent in Burma; then follow in order (omitting the smaller units) Kashmir, Assam, the Punjab, Bengal, the North-West Frontier Province, Bombay,



NOTE.—For the purpose of this map Native States in political union with local Governments, we have been amalgamated with them. Baroda has been treated as part of Bombay, as its territory was not ruled with it.

Madras, the United Provinces and the Central Provinces. The people of Bengal, as a whole, suffer less than half as much from this affliction as do those of Burma, but they are twice as liable to it as are the inhabitants of the United Provinces. In Bengal, however, we are dealing with a quarter of the total population of India, and the incidence of the infirmity varies in different parts of the Province. Amongst the ten million inhabitants of North Bengal, *i.e.*, the portion of Bengal Proper which lies to the north of the Padma river, insanity is very nearly as prevalent as it is in Burma, while the twenty two millions in Bihar are more free from it than their neighbours in the United Provinces, and the incidence in Orissa is very similar to that reported from the Madras Presidency.

In other provinces also there are marked local variations. In Burma the affliction is most common in the Chin Hills, and in Assam, in the Lushai Hills which adjoin this tract, and in the west of the Brahmaputra valley, which borders on the area of greatest prevalence in Bengal. In the United Provinces the western Sub-Himalayan districts suffer most, in Bombay, Sind, and in the Punjab, the south-western districts bordering on Sind. To some extent these variations may be due to the greater or less extent to which cretinism figures in the return. The Burma Superintendent suggests that its inclusion accounts for the very high proportion in the Chin Hills. But if this were so, as cretinism is a congenital defect, and cretins are relatively short-lived, we should expect to find an exceptionally large proportion of the insane population returned at the lower ages, whereas the proportion of the insane under ten years of age in Burma is much smaller, and that over 60 years is much higher, than in India taken as a whole. In Kashmir, on the other hand, 18 per cent. of the persons returned as insane are under 10 years of age, compared with an average of 7 per cent. in the whole of India, and its high position on the list is thus clearly due to the more general inclusion of cretinism. In Bombay, the Central Provinces, the Punjab and the North-West Frontier Province the proportion under 10 is above the general mean, and in Bengal, Madras, the United Provinces, and Assam it is below it, but the age distribution of the insane given in subsidiary table V indicates that, as a rule, the variations in the returns for different provinces are not due, to any appreciable extent, to difference of practice in respect of cretins, and some other explanation must therefore be sought for.

238 The conditions which may conceivably cause or predispose to insanity must fall under one or other of three heads, *viz.*, locality (including climate), social practices, physical ailments and race. The close connection between cretinism, goitre and deaf-dumbness has already been adverted to, and it will be seen, when examining the statistics relating to the last mentioned affliction, that its prevalence is markedly influenced by the water-supply, and that it is most common along the course of certain rivers, and more especially of some which have their source in the Himalayas.

Causes of
insanity —
(1) Locality

Province	ORDER IN RANK OF	
	Insanity	Deaf mutism
Burma	1	8
Assam	2	2
Punjab	3	1
Bengal	4	3
Madras	5	4
Bombay	6	6
United Provinces	7	7
Central Provinces	8	5

It will be observed from the figures in the margin that, with the notable exception of Burma, the relative incidence of insanity and deaf-mutism follows very closely the same general direction. This would seem to support the view that the figures for mental unsoundness have been greatly affected by the inclusion of cretins, but reasons have already been adduced for concluding that such is not the case. Moreover, an examination of the distribution within certain provinces shows that although their position, as a whole, is much the same in both cases, there are great local variations. In Bengal insanity is most prevalent in certain districts in North Bengal, while deaf-mutism is most rife in the north-west of Bihar, where comparatively few persons have been returned as insane. Similarly in the United Provinces the greatest amount of insanity is found in the "Sub-Himalaya, West," and the "Indo-Gangetic Plain, East," where the occurrence of deaf-dumbness is below the provincial mean and the latter infirmity is exceptionally frequent in the "Himalaya West," where there is less than the average proportion of insane persons. In Madras the Natural Divisions all show the same proportion of 'insane,' but there are marked irregularities

in the distribution of the deaf-mute. The conclusion seems, therefore, to be, either that the general correspondence noticed is accidental, or else that the fluvial or telluric conditions, which in some parts conduce to deaf-dumbness and cretinism, may in other parts, where they are found in a somewhat modified form, have a tendency to promote insanity.

It is, however, very difficult to trace any connection between insanity and local conditions. The areas of greatest prevalence include damp countries like Burma and dry ones like the Punjab, it is excessive in the hilly country occupied by the Chins, but not in the Vindhya and Satpura ranges, in the terai of North Bengal and West Assam, but not in that of Bihar and East Assam, in the delta of the Ganges and the Brahmaputra, but not in those of the Mahanadi, Kistna and Godavari.

(2) Social
Practices

23). The principal social practices which have at different times been accused of tending to insanity include (1) the consumption of ganja or spirits and sexual excesses, (2) consanguineous marriages, (3) enforced widowhood among Hindus, and the *Zenana* system of the Muhammadans. The finding of the majority of the Hemp Drugs Commission was that the moderate use of ganja does no appreciable harm to the brain, although, when taken in excess, which is very rarely the case, it may induce insanity, especially when there is any weakness or hereditary predisposition. The opposite view, however, is still widely held, and the enquiries made regarding the causes of insanity in cases sent to asylums in Bengal in 1901 resulted in the conclusion that in three-quarters of the total number the causes were physical, and that of these the habitual use of ganja was the chief. In Madras, on the other hand, the finding of the Commission has led to much greater caution, and the number of cases declared to be due to this drug fell from 27 in 1895 to 4 in 1900. However this may be, there appears to be no general correspondence between the consumption of ganja and the prevalence of insanity. The Bengal Superintendent writes—

Excluding Calcutta the consumption is greatest in Purnea and Shahabad, where insanity is rare. Then come the 24 Parganas, Jalpaiguri, Mymensingh, Patna, and Monghyr. Jalpaiguri is one of the districts where the disease is most common, but it is less so than in Rangpur, where the average consumption of the drug is barely half of that in the districts mentioned above. It may, however, be mentioned that, concurrently with a decrease in the prevalence of insanity, the consumption of ganja has fallen off in this province.

Mr Francis in Madras and Mr Allen in Assam are also unable to trace any connection between the consumption of drugs or spirits and insanity. So far as the use of alcohol is concerned, it may be noted that it is the lowest classes of the population who are chiefly addicted to it, and it is precisely amongst these classes that the proportion of mental aberration is lowest.

The theory that consanguineous marriages have a tendency to produce mental unsoundness receives little support from the census figures. There seems to be no special tendency to such marriages in the tracts where insanity is most rife, and although Muhammadans, who as a class are more prone than the Hindus to marriages with near relations, seem to suffer from it in some parts more than do the Hindus, this is not universally the case. There are, moreover, other circumstances, such as the consumption of ganja in its most deleterious form, *i.e.*, by smoking, which may possibly account for the greater prevalence among Muhammadans, where it exists. In the case of Hindus it is found mainly amongst the higher castes whose rules proscribe most rigidly the marriage of blood relations. In Madras, the Central Provinces and Bombay the Brahmans suffer most of all, and next to them other castes of good social status.

The allegation that enforced widowhood and the *Zenana* system, however much suffering or weariness they may entail, are prejudicial to the mental equilibrium seems wholly opposed to the facts, and it is precisely during the period when these conditions are in operation, *i.e.*, between the ages of 10 and 50, that the deficiency of females amongst the insane population is most marked. At the same time it must be remembered that this is the time of life when women are kept in seclusion, and when the defects from which they may suffer are most likely to be concealed.

(8) Race

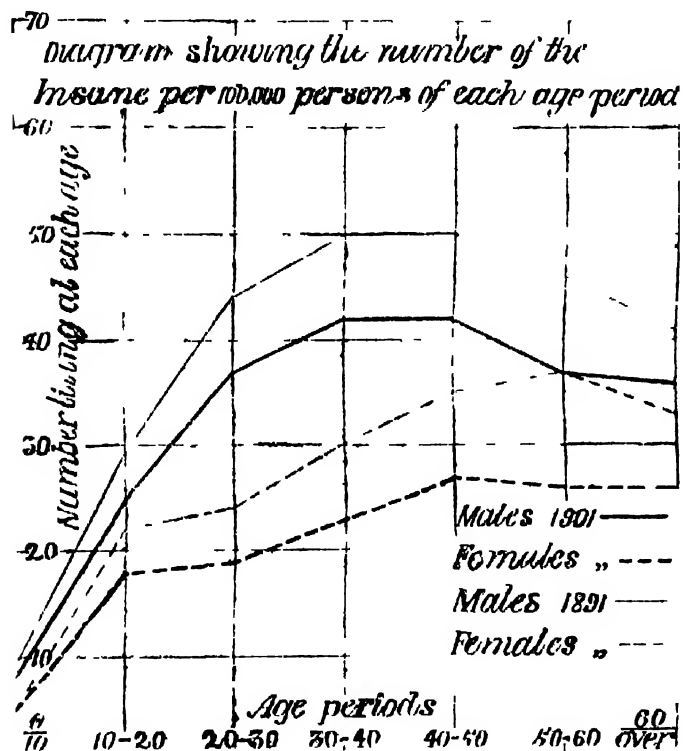
240. It seems probable that race affects the relative prevalence of this infirmity more than any of the causes yet noted. The following observations on this subject are extracted from the Bengal Census Report.—

There is perhaps more to be said for Mr O'Donnell's view that the result is due to differences of race rather than locality, and that the Mongoloid tribes, who form the main ingredient

in the population of Northern and Eastern Bengal, are more prone to mental disease than the inhabitants of Bihar and Chota Nagpur, whose origin is, in the main, Dravidian. But here, too, the facts do not altogether fit in. The Mongoloid population, though great in North Bengal and Goalpara, is still greater higher up the Assam Valley. It would seem, therefore, that insanity should increase steadily as one proceeds eastwards across the Assam border. As a matter of fact, however, its incidence in the Brahmaputra Valley is greatest in Goalpara, which adjoins the great centre of the disease in Bengal, and rapidly decreases towards the east. The fact seems to be that while the Mongoloid races, as a whole, are far more prone to insanity than the Dravidian, the Koch is the tribe that suffers from it more than any other. The main habitat of this tribe is in the tract where insanity is most prevalent, *i. e.*, in North Bengal and in Goalpara in Assam, east of Goalpara the true Koch element forms a smaller proportion of the population. The proposed explanation does not account for the high ratio of insanity in the Chittagong Hill Tracts, but here also it is doubtless a matter of race, as this district adjoins Burma, and insanity is very prevalent amongst the Burmese.

It may be added that, as already mentioned, mental unsoundness, both in Burma and Assam, is specially prevalent in the hills inhabited by the Chins and Lushais, who are very closely related to the tribes of the Chittagong Hill Tracts. In Madras, in 1891, Mr Stuart noticed traces of a racial tendency, but it is not clear how far this view is borne out by the results of the present Census of that Presidency.

241 The number of insane persons of both sexes per 100,000 of the population is shown in the annexed diagram. Insanity by age



The proportion is small in early youth, when there is a natural reluctance on the part of parents to recognise the existence of mental disease, and the increase during the first few years of life is probably only apparent. In the case of males there is a rapid rise in the number of the insane between the ages of 20 and 30, the season of the passions, and a further, but less noticeable, increase continues up to the age of 40. After this age the number of new cases at first just suffices to replace death vacancies, due to the relatively high mortality among persons thus afflicted, but from 50 onwards so few persons became insane that the proportion of the afflicted to the general population declines steadily. In the case of females, once the period of puberty and early child-bearing is passed, the liability to serious disturbance of the mental equilibrium is far less marked than it is in the case of males. Between the ages of 20 and 30 the proportion of the afflicted is almost constant, and it then gradually rises to a maximum at '40—50', *i. e.*, at the 'change of life'.

212 Except in England, where the female lunatics die or are cured less readily than the male and so accumulate more quickly, the number of insane males in all countries greatly exceeds that of females. This is specially the case in India, where the women lead a quiet, secluded and monotonous life, and are to a great extent restrained from the excesses in which men often indulge where their work is lighter, and they suffer less from hardship, exposure and anxiety. The proportion of females to males amongst the insane is highest in Burma and the hill tracts of Assam, where the women live much the same sort of life as the men. The proportion is also fairly high in Bengal and Madras, but in Bombay, the United Provinces and the Punjab those who suffer from the infirmity are only half as numerous as the males. Generally speaking, it may be said that where insanity is most common the proportion of females is high, and *vice versa*. In India as a whole there are three females afflicted to every five of the stronger sex. The excess of males is least in early childhood and old age, and greatest in middle life, between the ages of 25 and 40, but as noted above, it is just at these ages that concealment is most likely to affect the figures.

The proportion of the sexes

Insanity by
caste

213 The return of infirmities by caste was an optional one and it has not been prepared for several of the larger provinces. Moreover, even where prepared, the principle generally followed has been to work out the figures for each caste only in one or two districts where it was numerous, and there is thus no means of knowing whether the varying prevalence of the disease is due to circumstances peculiar to individual castes or to the localities in which they were dealt with. The only way to eliminate the disturbing influence of locality would be by comparing the prevalence of the affliction in particular castes with the general rates in the districts where the figures for them were worked out. At the same time several general facts stand out clearly. The Eurasians are of all classes in India the most liable to insanity and next to them come the Parsis. Generally, though not always, the Muhamminadans suffer more than the Hindus, and among the latter the liability to insanity varies roughly with social position—the highest castes suffer most and the lowest castes least of all.

Deaf-mutism.

Meaning of
the figures

214 The object aimed at was to obtain a return of the persons suffering from congenital deaf-mutism and the enumerators were told to enter only those who were deaf and dumb from birth. In the absence of close supervision, however, such instructions are apt to be overlooked and persons are liable to be entered as deaf and dumb, who were not so from birth, or who have merely lost their hearing on account of old age*. At each succeeding census, mistakes of this nature have been gradually reduced, and it is believed that in some provinces the return is now fairly accurate, but in others there is still room for improvement, especially in tracts which have for the first time been brought within the scope of the census, where the arrangements for instruction and supervision were necessarily less complete than elsewhere. Where a person was afflicted with this infirmity the enumerators were directed to enter him as 'deaf and dumb', but sometimes the words 'deaf' or 'dumb' alone were entered. In the course of tabulation, the entries of 'deaf' were neglected altogether, but persons shown as dumb were assumed to be congenital deaf-mutes. This may possibly have added to the returns some who had lost their speech by accident or illness, or the excessive growth of goitre, but probably not more than the number of genuine deaf-mutes omitted because shown only as 'deaf' by the enumerators.

In India as a whole there are now 6 males and 4 females who are deaf and dumb in every 10,000 persons of each sex, compared with 6 males and 5 females, in England and Wales.

Comparison
with 1891

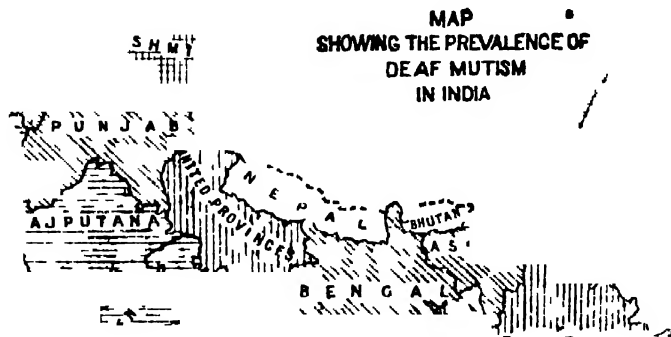
215 The proportional number of deaf-mutes has declined steadily since 1881. With one or two minor exceptions, the general result, as compared with the last census, is shared by all parts of India, and it will be seen from the diagram in the margin of paragraph 249 that it is due to a great decrease in the number of persons shown as deaf and dumb at the higher ages. The defect is a congenital one and the persons who suffer from it are relatively short-lived. Consequently the proportion of such persons to the total number living at each age-period should show a steady decline. The return for young children is incomplete, as parents are unwilling to admit the existence of the malady so long as there is any, even the remotest, chance of its proving only temporary, but from the age of 10 onwards, the proportion at the present census undergoes a progressive diminution, whereas in 1891 it rose rapidly at the higher ages, and the same phenomenon was even more noticeable in 1881. This shows that on both those occasions many persons must have been included who had merely lost the sense of hearing in their old age, and that to a great extent the diminution in the number of deaf-mutes is due to greater accuracy of diagnosis†. At the same time, owing to famine, the decade must in many parts have been one of exceptionally high mortality amongst this class of persons especially in the case of those who were also idiots.

* The extent to which deaf-dumbness may be acquired after birth is uncertain. In Ireland, where separate statistics are collected, the recent census shows that there were 757 cases of acquired as compared with 2,179 cases of congenital deaf-mutism, but these figures cannot be relied on, owing to the well-known reluctance of parents to admit that the defect is from birth, and to their tendency to ascribe it to some post-natal accident or ailment. The general belief is that cases of acquired deaf-mutism are comparatively rare.

† There is still room for improvement, and it will be seen further on that in only four tracts is the proportion of deaf-mutes at the age '60 and over' less than that in the population as a whole.

246 The general average of 6 males and 4 females who are afflicted per 10,000 of each sex is the resultant of very divergent proportions in different parts of the country. Kashmir enjoys the unenviable reputation of harbouring more deaf-mutes in proportion to its population than any other province or state in India, then follow, in order, the Punjab, including the North-West Frontier Province, Assam and Bengal. In other words the infirmity is most common in the provinces and states at the foot of the Himalayas, with the exception only of the United Provinces, where the mean prevalence of the affliction is barely half

Local distribution



REFERENCES

6 PER 10000	10000
FROM 16 TO 18	10000
27 TO 40	10000
45 TO 62	10000
68 TO 80	10000
118	10000

NOTE.—Native States in political relation with Local Government have been amalgamated with them. Burma has been treated as part of Bombay.

most widely diffused in Madras, the figures for which province approach those for Bengal, and it is comparatively rare in Bombay, the Central Provinces and Burma.

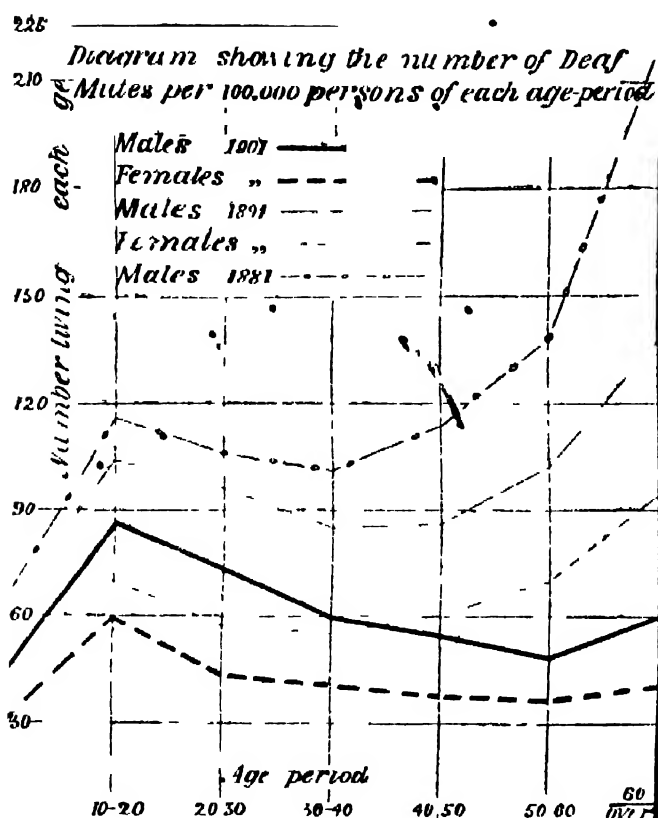
247 The connection of deaf-mutism with cretinism and goitre has already been noticed,* and all these maladies have been assigned, with apparent reason, to the injurious properties of the water of certain rivers, especially those which flow from the Himalayas, such as the Chenab, the Gandak and the Maklma. This aspect of the subject has been investigated with some fulness in the Bengal Census Report and it has been shown that, in the districts where deaf-dumbness is most prevalent, it haunts the banks of the Burhi Gandak, the Dhanauti and the Bagmati, and that it rapidly diminishes as the distance from these rivers increases. Mr. Burn in the United Provinces points out that the infirmity is chiefly found on the new alluvium deposited by the Ghagra, Gandak and Rapti, *z e*, presumably in the tracts where the water-supply is obtained from these rivers. In Burma and Assam the hilly country has a higher ratio of deaf-dumbness than the open lowlands, but the reports do not show whether it is diffused evenly throughout the hills or is confined mainly to the river valleys that intersect them. In Madras it is said that no connection is apparent between mountainous tracts and this infirmity and that no correlation can be traced between it and locality. It is possible that the failure may be due to the district having been taken as the unit of comparison, and that, if the ratios for smaller areas were examined, the influence of certain localities or sources of water-supply might be established.

248 In view of the fact that the distribution seems to depend mainly on locality, the figures showing the liability of particular classes of the population, even where they are forthcoming, are not of much interest. As noted by Mr. Francis, deaf-mutism has no special predilection for any individual religion or caste. The Muhammadans, in spite of their consanguineous marriages are not more prone to the affliction than the Hindus who eschew such connections.

* Enquiries made after the census in Bengal showed that of 327 persons who were deaf-mutes 118 were also insane, 105 were half-witted (of these all but 15 were able to do light work such as herding cattle) and 76 were suffering from goitre. It would seem desirable, at the next census, to add goitre to the list of infirmities recorded and to tabulate separately all cases where goitre is returned as combined with deaf-mutism, insanity or idiocy.

Proportion
of the sexes
and age dis-
tribution

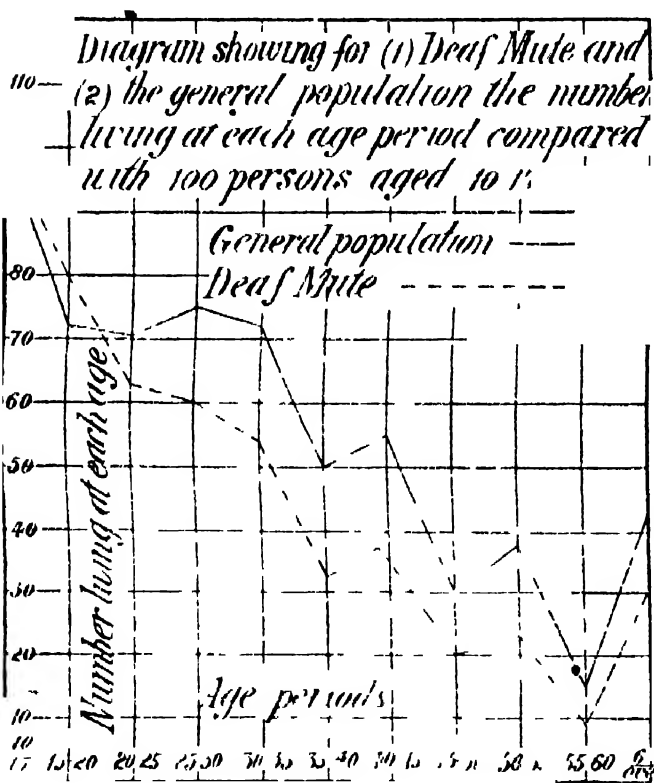
249 As in the case of other forms of congenital malformation, so also with



deaf-mutes, males in all countries suffer more than females, and in India they outnumber them in the ratio of 3 to 2. The proportion of the persons returned as deaf-mutes at each age is compared in the annexed diagram with the total population of the same age. So long as there is any possibility of a child eventually acquiring the power of speech and hearing, its parents will not admit that it is deaf and dumb and the number returned at ages under 10 is, therefore, much below the truth. From the age of 10 onwards, the proportion of deaf-mutes steadily declines, thus showing, on the one hand, that they have a shorter span of life than persons not so afflicted, and on the other, that at the present census the figures have not been swollen at the higher ages by the inclusion of persons who have merely become deaf in their

old age, to the same extent as on previous occasions. The return is, however, still not altogether free from errors of this nature, Madras, Berar, and Bengal are the only provinces, and Mysore the only native state, where the proportion of deaf-mutes over 60 years of age is smaller in relation to the general population than it is at all ages taken together.

250 The relative duration of life of the deaf-mutes is, however, more clearly



seen by a comparison of their age distribution with that of the general population, and the accompanying diagram has been prepared for this purpose. The figures for persons under 10 have been omitted, as in the case of deaf-mutes they are, as already stated, unreliable. For the purpose of this diagram, moreover, the uncorrected ages have been taken, as the point under consideration is the proportion borne by the deaf-mutes to the total number of persons returned at each age-period, and it may be assumed that whatever error attaches to the age-return equally affects that of the general population and of the deaf-mute. It appears that the number of deaf-mutes aged 10 who live to the age of '25-30' is barely three-quarters as great as that of persons not so afflicted, while at '50-55' the survivors amongst

the deaf-mutes are only half as numerous as those amongst the general population.

In Mysore a special table has been prepared which shows that of the deaf-mute population, 17 per cent. of the males and 15 per cent. of the females are married. It may be doubted whether such persons have been properly entered under this head, but the Superintendent reports that in the course of testing the schedules deaf-mute children were found with parents suffering from the same infirmity.

Blindness.

251 Blindness is, of all the infirmities recorded at the census, the most easy to diagnose and the least likely to be concealed. But even here error is possible, and the enumerators, if left to themselves, are apt to describe as blind, persons who are suffering merely from dimness of vision due to old age, or who have lost the sight of one eye only. There is in most languages of India a special word to indicate the latter condition, and where this was found in the schedules it was neglected in the course of tabulation. This may have led in a few cases to the omission of persons really blind, but the margin of error is probably very small. At the earlier enumerations a good deal of senile glaucoma was wrongly entered, but it is believed the stress laid upon the subject in the instructions, and the increased efficiency of the supervising agency have now reduced this source of error to very small dimensions.

In the whole of India 12 males and 12 females are blind out of every 10,000 of each sex, as compared with 9 males and 8 females in England and Wales according to the census of 1891. It is a matter of common observation that blindness is far more common in tropical countries than in those with temperate climate.

252 The number of the blind has decreased since 1891 in a greater proportion than that of any other infirmity, and in their case there is more room for satisfaction, as although the greater care taken to exclude mere dimness of vision and the relatively high mortality amongst blind persons in the famine years have had some share in the diminution recorded, a considerable part of it is due to the greater activity of the medical establishments. Mr Burn notices that the number of cases of eye disease relieved or cured in the United Provinces during the last decade was nearly

Provinces	1891 1890	1891 1900
Assam	25	123
Bengal	3,581	20,513
Bombay	2,035	2,062
Burma	47	135
Central Provinces	607	6,699
Madras	4,344	3,728
Punjab	14,213	12,942
United Provinces	43,361	70,093
TOTAL	68,236	116,295

73,000 compared with 47,000 in the course of the previous ten years. The main form, however, in which medical relief results in the restoration of sight is by means of operations for cataract. The total number of successful operations during the last two decades in the main provinces of India, is shown in the margin. It will be observed that the number of such operations in the decade preceding the present census, exceeds by 78,000, the number during the previous ten years, and that in Bengal and the Punjab the diminution in the number of the blind is far less than the larger number of cataract operations would have led one to anticipate. The persons who benefit by these operations are generally advanced in life and a very large proportion of those relieved in the earlier years of the decade must have been dead before the census was taken.

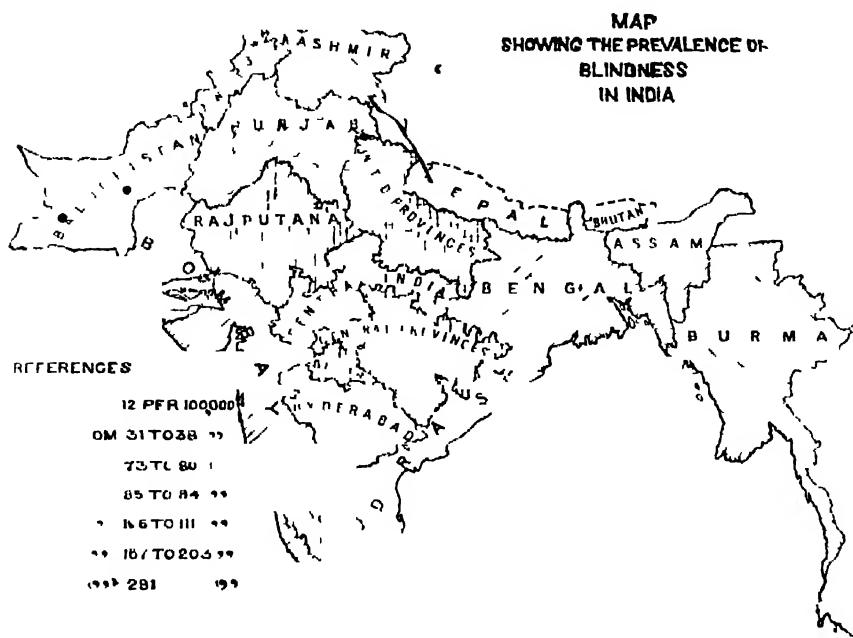
Some light is thrown on the extent to which the diminution in the number of the blind may be attributed to cataract extraction by an examination of the age statistics. The average age of patients thus operated on would appear to be from 51 to 54,* and the beneficial results of these operations would, therefore, be most noticeable at the higher ages. In Bengal the decrease in the number of the blind over 55 years of age exceeds the total decrease; in Madras and Burma it accounts for more than two-thirds, and in the Central Provinces for half. In the United Provinces and Bombay, on the other hand, only a quarter of the total is thus accounted for, and in the Punjab, in spite of a net decrease there are actually more blind persons at these ages than there were in 1891. It would seem that in these three provinces other causes must have been more potent than the efforts of the doctors in diminishing the number of blind persons. In Bombay the famine may be to blame, and the same cause is probably the chief one in Rajputana and Central India if the figures now returned are to be relied on. The net result for India, as a whole, excluding the Punjab, is that, of an aggregate reduction of 100,000 blind persons, about 11,000 consists of persons aged 55 and upwards.

* An analysis of one thousand consecutive cataract extractions by P. P. MANNING, M.B., F.R.C.S. (Eng.) D.P.H. (Camb)—*Indian Medical Gazette*, February 1903, page 41.

† The age distribution of the blind in the Punjab in 1891, was vitiated by the system then adopted in that province of entering in the schedules the current year of each person's age, and of allowing for this in the course of tabulation by deducting a year from the ages actually returned. The result, as will be explained in the Chapter on Age, was to set back by a quinquennium the round numbers (such as 20, 25, 30, etc.) at which the ages of the great majority of the population were entered.

distribution

253 The people of the Punjab suffer far more from blindness than those of any other part of India, and next to them, the inhabitants of the United Provinces and the Central Provinces *. In Bengal, Bombay, Madras and Assam the proportion of the blind is comparatively small. Within the Province of Bengal there are great local variations, and whereas in the more arid parts of Bihar the affliction is nearly as common as in the United Provinces, Eastern Bengal enjoys a



NOTE: Native States in political relation with Local Governments have been amalgamated with the n. Baroda has been treated as part of Bombay.

There are many causes of blindness, such as small-pox and other diseases, accident, ophthalmia and cataract, but in India it would probably be safe to say that the last two, and especially the last, are by far the most potent, and glare and dust conduce to both of them. The pungent smoke of the fires at which the people cook their food must also be most injurious to the sight. In hot and dry climates where vegetation is scanty, the houses are made with mud walls, and are smaller and worse ventilated than where the bamboo grows freely and is the principal material used in building. The smaller the hut and the worse its ventilation, the greater would be the effect of the smoke. In small huts, moreover, ophthalmia would spread more readily. In the hills also the houses are generally small and ill-ventilated, and this may account for the prevalence of blindness in some parts where it cannot be attributed to heat and glare.

There is no correspondence between the order in which the different provinces and states stand in respect of their mortality from small-pox and the extent to which blindness occurs. The same conclusion has been arrived at in several of the larger provinces after a detailed examination of the figures for individual districts, and in the Punjab there has been an apparent increase in the number of deaths from small-pox coupled with a reduction in the number of the blind. It may therefore be concluded that the cases where loss of sight is due to this disease form but a small proportion of the total number.

In provinces where the statistics for infirmities have been combined with those for caste it appears that the literate classes, far from being greater sufferers, have a smaller proportion of blind persons than the illiterate. In Bombay, for example, Europeans and Parsis stand at the bottom of the list and Mahars and Marathá Kunbis at the top.

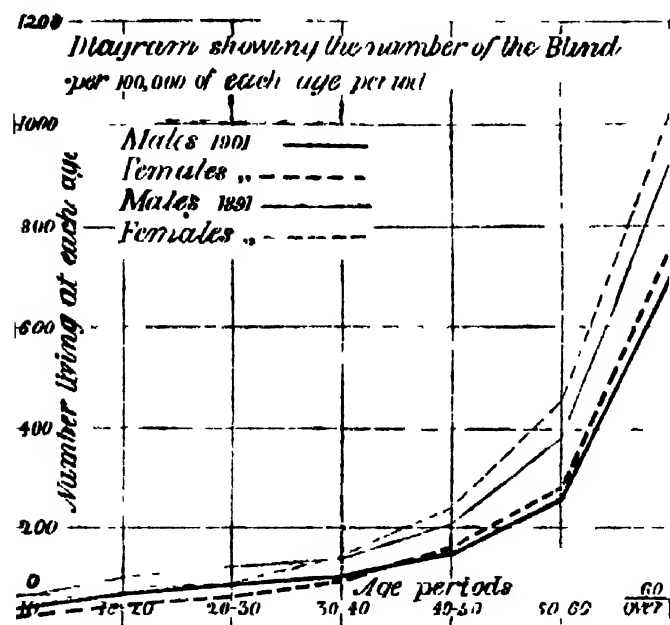
Proportion of the sexes

251 Unlike the other infirmities dealt with, in the case of blindness, females suffer equally with males. The proportions, however, are not uniform. Where the affliction is most common females are in marked excess, and the reverse is the case in places where it is less prevalent. When the affliction is congenital, men, as usual, suffer most, and they are also more liable than women to loss of sight by accident, but in the tracts where blindness is most prevalent, it is due chiefly to other causes, and as, in these tracts, the proportion of the female blind is always high, it seems clear that there is something in the adverse conditions

* In 1891 Rajputana held the second place but the proportion of the blind now recorded there is less than a quarter of the number ten years ago.

that prevail which specially affects the sight of women. It may be that women are less able than men to bear the glare and dust, or else that they resort less freely to the hospitals where medical relief is afforded, or it may be that the dark, smoky and ill-ventilated houses, where they cook and in which they spend a great part of their time, are responsible for affections of the eye even more than the dust and glare met with out of doors.

255 The age distribution of the blind differs greatly from that of persons suffering from other infirmities.



partly to the fact already mentioned that females are less ready to seek medical aid* and partly to the circumstance that with them congenital blindness is more rare, and there is thus a larger proportion of cases where it is due to external conditions, such as glare, dust and smoke which operate gradually and do not finally destroy the sight until people are well advanced in life. It is also just possible that a certain amount of blindness amongst young girls may have escaped registration.

Leprosy.

256 The census of 1881 showed a considerable increase in the number of lepers in India, and some years later when public attention was attracted to the subject by the death of Father Damien, who for sixteen years had devoted himself to the relief of the Hawaiian lepers, these figures were taken as indicating a rapid spread of the disease, and a Leprosy Commission was appointed to visit India and enquire into the etiology and dissemination of the disease, and the means by which it might be stamped out. This was in 1890. The census of 1891, which was taken while the Commission was still in India, showed a marked general decline in the number of lepers, and the Commission had no difficulty in disposing of the cry that had been raised that leprosy was an imperial danger. The findings of the Commission on other points may be summarized as follows:—The disease has no marked tendency to spread either by hereditary transmission or by contagion, but in the great majority of cases it originates *de novo*.† No race is exempt from the disease, but the poor and destitute are attacked much more frequently than the rich and prosperous. No article of diet, *e.g.*, fish, can be held to cause the disease, but it is possible that some kinds of food may render the system more ready to contract it. The same conclusion applies to insanitary surroundings and syphilis. No geological formation and no locality can claim to be free from the disease, and no correspondence can be traced between its occurrence and variations in the temperature; but its diffusion seems to vary inversely with the dryness of the climate, and the tracts which suffer most are generally those where endemic cholera is

The Leprosy Commission of 1890-91

* In certain districts of Bengal where enquiry was made it was found that the men operated on for cataract outnumbered the women in the ratio of 3 to 2.

† The expediency of segregating pauper lepers under suitable safeguards and of forbidding lepers generally from following certain trades and callings connected with the bodily requirements of human beings was urged by the Leprosy Commission, and in 1893 an Act was passed to provide for the arrest, examination and segregation in properly appointed asylums of lepers having no ostensible means of subsistence beyond begging for charity, for enabling local bodies to assist in furnishing funds for the maintenance and medical treatment of pauper lepers so secluded, and for restraining lepers from engaging in certain occupations of the kind already referred to. This enactment, which does not operate until it has been specially extended, has been put in force in parts of the United Provinces and in Burma, and a similar Act of the local Legislature has been applied in Bengal. No action has yet been taken in Madras, Bombay, the Punjab and other provinces.

most prevalent The Berlin International Conference of 1897 held that the disease is caused by a bacillus whose life history is unknown, but that it probably enters the system by the nose and mucous membrane, it also held that the disease is contagious but not hereditary.

Mr Jonathan
Hutchinson's
conclusions

257 The most recent investigations into the causation of leprosy are those carried out by Mr Jonathan Hutchinson, F R C S, first in South Africa and then in India. The conclusions arrived at by him are briefly as follows —

- (1) That leprosy is caused by a bacillus which gains access to the body through the stomach and not by the breath or by the skin
- (2) That there is great danger in eating food directly from the hands of a leper, but that this danger is rarely encountered except by young children
- (3) That in the great majority of cases in which grown up persons become lepers, the bacillus enters the stomach in connection with badly cured fish, eaten in a state of partial decomposition and not sufficiently cooked.
- (4) That the bacillus is not present in any other form of fish food than that just referred to, which is indeed usually taken as a condiment (with rice, etc.) rather than an article of diet
- (5) That it is but very seldom that the bacillus is present even in such fish, and that it is especially likely to be found in fish which has been imported from a distance.
- (6) That a very small quantity of tainted fish may suffice to introduce the bacillus, and that a long period is necessary before its results will be observed.
- (7) That it is, consequently, not surprising that in India leprosy is often found in regions at a distance from rivers or seas, and where comparatively little fish is consumed.
- (8) That in cases in which individual lepers state that they have never eaten fish, the disease has either been acquired by commensal communication or the question has been misunderstood or, perhaps, in a few instances, that the reply is not a truthful one

These conclusions have not yet been generally accepted by other authorities, and no one has hitherto succeeded in finding the typical bacillus, which very closely resembles that of tuberculosis, in fish, or indeed anywhere except in the human body. So far as the practical question of contagion is concerned, Mr Hutchinson's theory agrees with that of the Indian Leprosy Commission and differs from that arrived at by the Berlin International Conference *

Local dis-
tribution

Province and to	Population	NUMBER OF LEPROS PER 1,000 OF EACH SEX	
		Males	Females
<i>Bengal</i>			
Bankura district	1,116,411	37	17
Burdwan "	902,380	32	11
Bardhaman "	1,532,475	21	9
Medinipur "	1,301,364	19	12
<i>Assam</i>			
Goalpara district	162,052	21	
<i>Beiar</i>			
Akola district	582,510	18	
Buldana "	123,616	18	
Ellichpur "	297,403	19	
<i>United Provinces</i>			
Himalaya, West	1,385,225	17	
<i>Punjab</i>			
Himalayan area	1,190,086	16	
<i>Bengal</i>			
Orissa division	4,343,150	17	

* It has been suggested that the Berlin Conference in its conclusion that leprosy is contagious, was influenced by the circumstance that it is caused by a bacillus rather than by direct evidence on the point

† Much stress is laid by Mr Hutchinson on the excessive prevalence of leprosy in the small island of Minicoy, one of the Laccadive Islands. The total population of the Laccadives is 10,274 and there are in all 15 lepers. The abstraction papers having been destroyed I have been unable to ascertain how many of them were on the island of Minicoy, but even if it be assumed that they were all found there, although the ratio to the total population of the islands (3,097, all Muhammadans but 2) is high, the absolute number is so small that the ratio seems to be of relatively small importance. It is interesting to notice that the islanders rigorously segregate their lepers in a special settlement. It may be mentioned that according to various official reports the number of lepers at this settlement has varied between 9 in 1877 and 17 in 1889

barely one-third. The affliction, however, is extraordinarily local and, in order to ascertain the areas where it is mostly found, it is necessary to dip further into the statistics and to examine the proportions for individual districts. These are indicated in the map facing this page, which corresponds to the maps in the report of the Indian Leprosy Commission showing the local distribution of the disease at the three previous censuses. It thus appears that the blackest spot in the whole of India is found in a small group of districts in West Bengal* in the worst of which, Bankura, leprosy would seem to be twice as prevalent as it is in any other part of India. Then comes the Goalpara district of Assam, then the western part of Berar, and then a tract on the lower spurs of the Himalayas lying partly in the Punjab and partly in the United Provinces. The disease is here slightly more widespread than in the Orissa Division of Bengal.

259 The physical and climatic characteristics of these tracts differ greatly. The affected area in West Bengal has a slightly elevated and undulating surface and rests mainly on the laterite; the climate is, on the whole, dry, and the rainfall light. Goalpara is a level, alluvial formation lying between the Bhotan hills and the Brahmaputra river, with a damp climate and a heavy rainfall. West Berar is in the main a broad elevated river valley, with a deep black soil, but it merges into hilly country on the north and south; the heat is great before the rains set in, but afterwards the air is moist and cool. The Himalayan region in the Punjab and United Provinces is mountainous, and the climate is a temperate one. The Orissa division of Bengal is a narrow alluvial deposit lying between the hills of the Satpura range and the sea, with a damp climate, numerous rivers and a fairly copious rainfall.

The variations are equally marked in respect of the races of the inhabitants and of their normal food supply. In most parts rice is the staple food, but in Berar millet takes its place, and in the Himalayan area wheat and maize are also eaten. In some parts fish is plentiful while in others it is scarce, but Mr. Hutchinson's theory that fish is the cause depends on the quality rather than on the quantity of fish eaten; and before it can be concluded that the local distribution of the disease in India is opposed to it, it is necessary to enquire whether, and to what extent, cured fish is used as a condiment or an article of diet in the tracts where leprosy is worst.†

The following extract from the Bengal report deals with the local distribution of the disease in that province.—

There is little in the findings of the Leprosy Commission that will help us to explain the varying prevalence of the disease in this province. In East Bengal the people are prosperous and well nourished, and, so far as these factors affect the question, their relative freedom from leprosy is intelligible. But its diffusion is said to vary also with the degree of moisture in the atmosphere, and East Bengal has a far more humid climate than the districts where leprosy is most rife. North Bihar is probably not less damp than these districts, and its population is on the whole less prosperous, and yet it is comparatively free from the disease. As regards

Natural Division	Number of deaths from cholera per 10,000 in 1891-1900	Number of leprosy per 10,000 of the population
West Bengal	20	116
Central "	31	31
North "	20	43
East "	30	22
North Bihar	29	28
South "	30	44
Orissa	40	109
Chota Nagpur Plateau	15	58

cholera also, no connection can be traced. The ravages of this disease during the last ten years have been worst in Orissa, Central and East Bengal, and North Bihar. Orissa also stands high amongst the localities where leprosy is prevalent, but East Bengal and North Bihar are the two parts of the province where that disease is least common. On the other hand, West Bengal with the greatest prevalence of leprosy, has suffered less from cholera than any part of the province except Chota Nagpur, and the two districts of West Bengal, where leprosy is worst, have the smallest cholera mortality. Birbhum has thus lost only 14 and Bankura only 13 persons per 1,000 of its population during the decade, while no other district in the division has lost less than 19 per 1,000. Neither does the hypothesis that it is due to the use of badly-cured fish find any corroboration in the excessive prevalence of the disease in Birbhum, Bankura and Manbhum.

* The proportion in North Arakan in Burma is even higher, but the total population of this tract is only 20,000 and the figures have, perhaps, no special significance in the absence of a high ratio of leprosy in the surrounding country. It is, however, worthy of notice that the district has returned a relatively large number of leprosy cases continuously since 1881.

† In the *Encyclopædia Britannica* it is said that leprosy is now endemic (chiefly but not exclusively) among people who inhabit the sea coast or the estuaries of rivers, who live much on fish, often putrid, and who intermarry closely. Orissa is the only one of the badly affected tracts in India which answers to this description, so far as locality is concerned, but intermarriage is not specially prevalent there or in any of the tracts where the disease is most common.

Very little fish is imported to these districts, and it enters but very slightly into the diet of the people. Mr. De, the Magistrate of Bankura, thinks that the people of that part of the country must in some way be specially liable to the disease, and he mentions that in Khulna he found leprosy more common amongst the Bunas, who had gone thither from Bankura and the neighbouring districts, than amongst the indigenous inhabitants. The Deputy Commissioner of Manbhum says that many of the lower castes eat the carcasses of cattle that have died of disease, and think that this may predispose to leprosy, although, as he points out, the disease is not confined to these castes.

It may be added that further enquiries since made with special reference to the eating of cured fish tend to show that its consumption in this form also is extremely rare in Bankura.*

Comparison
with 1891

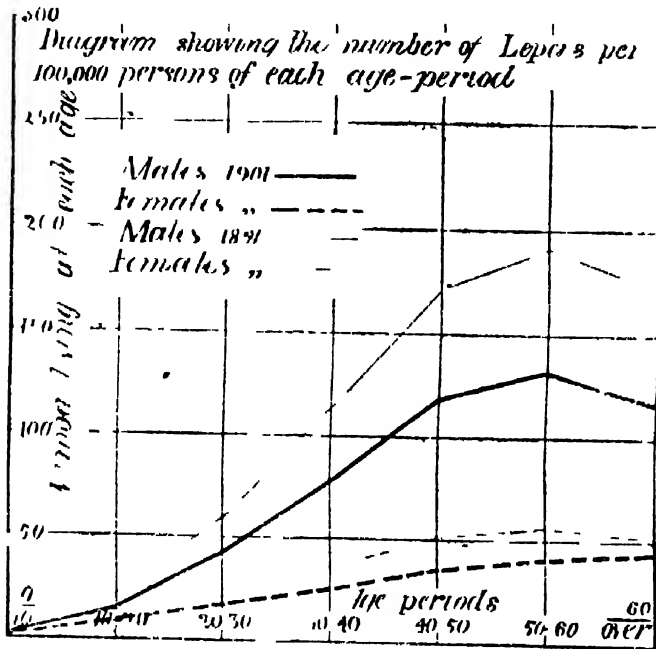
260 The number of lepers according to the census of 1891 was less by more than 4 per cent than that at the preceding enumeration, and there is now a further falling off of no less than 23 per cent, which is shared by all parts of India except Madras and Travancore, but is especially noticeable in Bombay, Burma, the United Provinces and Assam. As mentioned already, leprosy is a disease which it is especially difficult for any one but a medical man to diagnose with certainty, and there are various other affections, such as leucoderma, syphilis and certain skin diseases, which may easily be mistaken for it. It is possible, therefore, that the greater care taken at the present census to secure a complete examination of the schedules by the higher grades of census officers may have led to a more complete elimination of erroneous entries than on previous occasions. In Assam it is suggested that Naga sores were often mistaken for leprosy in 1891, and that possibly on the present occasion the enumerators have gone to the other extreme and failed to enter genuine cases of the disease. The lepers, like other afflicted persons,* suffered more in the famine years than the general population, and it is stated in Bengal that many were carried off by the plague, to which their mode of living and the sores engendered by their disease, render them specially liable. If this be so, and it seems very probable, it would help to account for the great falling off in Bombay. One peculiarity of the variations deserves mention, namely, the fact that where leprosy is worst the decline is generally less marked than in places where it is comparatively rare. In Bengal, for example, the only districts where a greater amount of leprosy has been returned than in 1891 are Manbhum and the Sonthal Parganas which border on the area of maximum prevalence. Similarly in the Punjab, Nahan, which contains more lepers in proportion to its population than any other tract, is almost unique in its failure to record any diminution in the number. In Madras, the fifteen districts which show an increase in their leper population have a larger proportion of lepers than the ten which show a decrease. This would seem to support the view that a considerable part of the diminution recorded is due to the more complete exclusion of persons who are not really lepers, as wrong entries would be most likely to occur in tracts where true leprosy is not very well known.

It is possible, however, that the census figures, as they now stand, fail to represent the full prevalence of leprosy in India. The disease is regarded with horror and disgust and those who suffer from it conceal the fact whenever they are able to do so. It is commonly supposed that Europeans in India are practically exempt, but Mr. Hutchinson, with whom I have had an opportunity of discussing the subject, tells me that this is by no means the case, and that he has had under treatment in England Europeans who contracted the malady in this country. The fact is not generally known because of the reticence of persons who suffer from it. In the case of natives of the country the same dislike to publicity is felt, but it is overcome amongst the very poor, who cannot otherwise support themselves, by the necessity of begging and of using their unfortunate plight as a means of exciting the compassion of the charitably disposed. In the case of those who do not beg, concealment is less easy amongst the poor than amongst the rich, and amongst males, who mix freely with their fellow villagers and wear but scanty clothing, than amongst women, whose dress more completely covers them and who live a more secluded life. The prejudice against publicity is also much stronger in the case of women. There seems to be no reason why the age distribution of male and female lepers should differ very widely, but it will be seen on referring to the diagram in the next paragraph that whereas the number of afflicted males rises rapidly after the

* They probably suffered in a very special degree as leprosy is emphatically a disease that attacks the lower classes of society.

age of 20, that of females does so very gradually. The difference in the direction of the two curves clearly indicates that there has been a relatively greater concealment in case of female lepers. This subject will be reverted to in paragraph 262. Apart from wilful suppression it is probable that the efforts made in 1891 and at the present census to exclude cases of mere skin discoloration from the return have resulted in the omission of a certain amount of the true corrosive disease. Mr. Hutchinson informs me that in the earlier stages of real leprosy it is very difficult to distinguish it from leucoderma, and that even a trained medical man has to make a very careful examination before he can satisfy himself as to the diagnosis. The enumerators, who had been specially warned against the entry of white leprosy, would thus be very likely to omit persons suffering from the initial stage of the disease. Mr. Hutchinson thinks, therefore, that after making allowance for the havoc wrought by famine and possibly plague, the census figures afford very little evidence to show that this loathsome disease is really on the wane.

261 The diagram given in the margin shows the number of lepers per 100,000 persons of each age-period. Age distribution.



persons of each age-period. The return for females during the period when they are capable of child-bearing is so incomplete that in their case it is impossible to draw any inference from the recorded age distribution, and it is best to confine our attention to the figures for males. Under the age of 10 the proportion of lepers is exceedingly small, but it soon begins to grow. There is a considerable increase between 10 and 20, and from that age until 50 the rise is uniform and rapid. Between 50 and 60 the number still continues to increase, though less quickly, and it then again declines. A leper's life is a comparatively short one. Accord-

ing to one of the most reliable estimates (that of Daniellson and Boeck) the average duration of life from the date of attack is only nine and-a-half years for tuberculated and eighteen and-a-half years in the case of anasthetic leprosy. It follows that the steady increase in the proportion of lepers between the ages of 20 and 60 indicates a marked rise in the liability to infection at this period of life.

If absolute numbers be taken, the increment in the leper population is greatest between the ages of 20 and 40. During the

Age period	Variation of leper number
0-10	+ 1,877
10-20	+ 5,891
20-30	+ 7,285
30-40	+ 7,336
40-50	+ 757
50-60	- 7,315
60 and over	- 1,598

next 10 years the increase is very slight and from 50 onwards the number rapidly falls. After allowing for cases of new infection necessary to fill death vacancies, it would seem that the greatest number of persons must become lepers between the ages of 20 and 40. This confirms the conclusion arrived at by Mr. Barnes in 1891 that leprosy "seems to pass by the young and to begin its attacks about 25 years of age." The Leprosy Com-

missioners found that of the comparatively small number of lepers that came under their observation, the greatest number became lepers when between 25 years of age and 30.*

262 In the case of all infirmities, except blindness, males greatly exceed females, but in none do they do so to the same extent as among lepers, where they outnumber them in the ratio of 3 to 1. It has already been suggested that this Proportion of the sexes

* It must be borne in mind that a person may have imbibed the seeds of the disease long before he shows any signs of suffering from it, and the bacillus may remain quite latent for an almost indefinite period. Cases are known in which patients did not develop the disease until many years had passed since their departure from the country where it had been acquired.

great difference is due, in part at least, to the omission of females from the return. The proportion approaches equality in the early years of life when there are 3 females to every 4 males, but it steadily falls until, at the age of 40, it is very little more than one in four; at the higher ages, where the motive for concealment has become less strong, it again rises slightly, and at the age-period '60 and over' there is one female leper to every three males. These results are very similar to those reported by the Leprosy Commission who found that in the case of small children under 5 years of age, both sexes were attacked in nearly equal proportions, while of the cases that came under their observation between 5 and 10, 95 were males and 56 females. The Leprosy Commissioners, however, dealt only with cases produced before them, and the proportion of the sexes must have been influenced, even more than in the case of the census figures, by the reluctance of the people to bring their female sufferers to notice, and their experience cannot, therefore, be invoked to confirm the accuracy of the latter. It is possible that the greater disproportion during the active years of life may be due in part to the fact that, at this period, men are more prone to expose themselves to the infection, however it may be conveyed, and the comparatively low proportion of females, even at the age '60 and over' when there would no longer be the same motive for concealment, tends to show that there is a real excess of male lepers, but at the same time it seems most improbable that this should be so to anything like the extent that would be necessary to account for the differences noted above.

The proportion of the sexes in different parts of India is generally fairly uniform, but in the Punjab, the Central Provinces, Burma and Kashmir, the females are about half as numerous as the males. The same ratio obtains in several of the worst districts in Bengal, where it is attributed, partly to the tendency of the males to travel further from home in search of alms, and partly to the fact that these districts are largely inhabited by semi-Hinduized people who are less inclined to be reticent about their women.

Distribution
by caste

263 There is very little to be gained by an examination of the statistics prepared in certain provinces showing the distribution of lepers by caste. The general conclusion which they indicate is that the lower castes suffer most, but this is vitiated by the fact that the amount of concealment practised varies, and is probably greatest in the case of the higher castes. In Burma the Chins suffer most, but this may be because they inhabit a part of the country where perhaps all classes suffer in a special degree. The same explanation may account for the special prevalence of the disease, noticed in Bombay, amongst the Mahars, Maráthá Kumbis and Maráthás.

SUBSIDIARY TABLE I

Number per 100 afflicted (all infirmities) who are suffering from each infirmity, and number of females afflicted per 100 males.

PROVINCE, STATE OR AGENCY	NUMBER PER 100 AFFLICTED WHO ARE				NUMBER OF FEMALES AFFLICTED PER 100 MALES			
	Insane	Blind	Deaf mute	Lepers	Insane	Blind	Deaf mute	Lepers
1	2	3	4	5	6	7	8	9
INDIA.	10	53	23	14	60	96	65	31
Provinces.	10	53	22	15	60	97	65	33
Ajmer-Merwara	9	74	14	3	17	94	51	32
Assam	14	32	26	28	70	89	68	29
Bengal	12	39	29	20	66	89	63	31
Bihar	3	57	11	29	69	108	80	45
Bombay	12	50	21	17	49	94	64	39
Burma	23	48	12	17	72	107	64	43
Central Provinces	5	62	17	16	49	143	71	53
Coorg	13	40	13	4	100	113	76	50
Madras	9	43	31	17	70	99	76	32
North-West Frontier Province	11	50	34	5	47	87	63	48
Punjab	8	72	17	3	51	92	67	35
United Provinces	6	70	15	9	48	99	56	28
States and Agencies.	9	51	26	11	59	87	67	42
Baroda State	8	58	24	10	54	118	64	52
Bengal States	13	39	24	21	60	97	66	43
Bombay States	8	57	23	12	63	112	65	35
Central India Agency	6	61	26	7	41	82	62	57
Central Provinces States	6	49	21	24	14	120	74	48
Hyderabad State	13	51	24	12	10	56	54	10
Kashmir State	15	33	35	17	54	74	59	44
Madras States	11	35	26	28	76	84	79	40
Cochin State	10	15	28	17	85	96	79	45
Travancore State	13	28	21	38	72	68	73	40
Mysore State	12	46	35	7	72	82	76	45
Punjab States	5	59	25	11	50	74	68	35
Rajputana Agency	9	70	17	4	64	92	63	53
United Provinces States	4	56	21	19	74	87	75	28

SUBSIDIARY

Number of persons afflicted per 100,000 of

PROVINCE, STATE OR AGENCY	ISSANE						DRAFF		
	Male			Female			Male		
	1901	1891	1881	1901	1891	1881	1901	1891	1881
1	2	3	4	5	6	7	8	9	10
INDIA.	28	33	43	17	21	28	62	86	103
Provinces.	31	34	44	19	22	28	68	95	106
Ajmer-Merwara	24	22	69	4	9	42	29	39	80
Assam	47	62	37	35	49	25	87	96	65
Bengal	35	40	53	23	27	36	84	116	153
Berar	14	19	36	10	14	26	44	21	101
Bombay	27	42	60	14	24	33	45	73	81
Burma	61	98	114	45	83	84	33	55	72
Central Provinces	18	21	31	9	12	17	54	59	78
Coorg	16	26	23	20	25	18	59	80	109
Madras	23	25	37	15	18	28	74	87	59
North-West Frontier Province	36	38	60	20	22	36	96	115	135
Punjab	47			28			90		
United Provinces	19	16	19	10	8	9	46	88	77
States and Agencies.	16	27	34	10	17	20	41	51	78
Baroda State	15	43	51	9	27	34	41	45	93
Bengal States	33	40		21	24	...	59	94	
Bombay States	14	30	38	9	20	24	37	68	79
Central India Agency	5			2	..		19		
Central Provinces States	13	15		6	10		41	52	
Hyderabad State	4	18	30	2	10	16	7	16	49
Kashmir State	60	...	...	37	.	..	136		
Madras States	21	22	..	16	15	...	46	47	
Cochin State	27	32	21	23	27	13	77	66	41
Travancore State	20	19		14	11	..	31	34	...
Mysore State	21	25	22	16	19	14	62	77	68
Punjab States	23	31	55	14	19	86	96	111	172
Rajputana Agency	12	32	...	8	19	...	22		
United Provinces States	10	27	18	8	12	10	57	60	136

In 1891 and 1881 infirmities were not recorded

TABLE II.

the population at each of the last three Censuses.

MUTE			BLIND						LIPER					
Female			Male			Female			Male			Female		
1901	1891	1881	1901	1891	1881	1901	1891	1881	1901	1891	1881	1901	1891	1881
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
42	57	67	121	164	216	120	171	240	48	68	84	17	23	29
45	62	69	134	164	216	135	168	242	55	74	89	19	25	30
16	24	61	120	181	355	125	209	508	8	7	9	3	3	3
62	76	39	97	108	74	91	106	57	125	188	96	39	61	38
53	71	94	96	100	136	85	96	144	72	93	122	24	31	41
36	15	81	193	227	331	213	241	402	138	193	215	63	58	60
20	49	59	88	149	240	88	148	294	43	78	87	18	27	34
22	47	48	105	172	152	117	229	162	56	117	101	25	52	33
39	43	59	144	156	218	189	188	296	58	66	89	30	33	41
56	64	85	45	49	92	63	51	90	6	13	25	4	14	23
55	65	48	91	101	150	88	104	167	54	54	67	17	18	25
{ 72 } { 64 }	76	89	{ 123 } { 316 }	338	480	{ 128 } { 340 }	368	541	{ 17 } { 21 }	30	52	{ 10 } { 9 }	11	18
28	52	47	168	231	269	178	243	322	36	58	63	11	13	16
29	36	51	73	164	204	67	183	221	25	42	47	11	16	18
28	50	62	75	161	248	95	235	351	18	32	39	10	15	17
40	56	.	78	87		79	91	.	69	88	..	30	36	
25	48	57	72	149	222	84	176	313	25	47	47	9	16	18
13	...	..	41	..	..	35			6	.		4	..	
29	38	..	75	85		88	91	.	52	73		25	43	...
4	30	29	15	100	128	9	84	110	4	38	42	2	14	18
92	.		115			96	.		72			36		
37	37	..	62	69		52	56	..	64	55		26	23	...
60	43	37	113	133	50	107	105	43	57	66	27	25	31	23
23	24	...	42	46	...	29	33	.	68	53		28	22	...
48	61	56	79	107	89	67	61	98	17	22	16	8	11	9
77	80	107	216	288	526	190	264	525	49	63	106	21	24	35
15	...	...	78	272	...	79	372	...	6	21	...	3	7	...
46	39	82	144	133	318	133	126	377	70	71	88	21	17	26

for the whole of Central India.

SUBSIDIARY TABLE III.

Showing (i) the number afflicted at each age period per 100,000 persons of that age and (ii) the number of females afflicted to 1,000 males.

AGE.	NUMBER AFFLICTED PER 100,000								NUMBER OF FEMALES AFFLICTED TO 1,000 MALES			
	Insane		Deaf mute		Blind		Lepor		Insane	Deaf mute	Blind	Lepor
	Males	Females	Males	Females	Males	Females	Males	Females				
1	2	3	4	5	6	7	8	9	10	11	12	13
All ages	28	17	62	42	121	120	48	17	602	653	959	344
0—5	3	3	20	15	29	19	2	1	788	775	670	744
5—10	12	8	66	47	51	34	4	3	656	681	631	657
10—15	20	15	80	59	66	50	10	7	624	614	620	580
15—20	30	21	91	61	80	59	23	14	657	623	684	516
20—25	36	20	79	46	92	62	36	15	594	636	731	463
25—30	38	19	69	42	91	70	50	18	480	590	750	350
30—35	40	22	63	43	99	91	69	23	539	662	884	324
35—40	45	25	55	38	108	109	92	29	486	600	895	276
40—45	41	27	55	38	141	152	113	34	627	661	1,046	294
45—50	43	27	53	39	169	185	128	38	565	613	964	264
50—55	36	25	49	37	240	273	131	41	695	747	1,136	311
55—60	38	28	48	37	310	347	132	43	670	699	1,030	299
60 and over	36	26	60	41	714	772	117	39	852	796	1,243	383

SUBSIDIARY TABLE IV

Comparing the Census Statistics of the insane with those of the Lunatic Asylums in certain Provinces.

PROVINCE	Number of Lunatics at Census of 1901	Variation per cent since 1891	NUMBER OF LUNATICS IN ASYLUMS IN 1901				Variation per cent since 1891			Number per 1,000 Lunatics who are in an Asylum	
			Total	Criminal	Total	Criminal	1901	1891			
1	2	3	4	5	6	7	8	9	10	11	12
Bengal	22,911	—5	913	489	—11	+4	41	44			
Madras	7,216	—6	559	149	—6	+9	77	78			
Pombay	3,895	—30	759	100	+10	—2	195	110			
United Provinces	6,849	+24	1,112	252	+11	+66	162	177			
Punjab	7,774	+23	482	101	+52	+98	62	50			
Burma	5,517	—20	390	194	+52	+109	71	37			
Central Provinces	1,330	—24	161	36	—38	—52	121	147			
Assam	2,510	—17	114	34	—3	+13	45	39			
TOTAL	58,038	—6	4,520	1,355	+5	+22	78	70			

SUBSIDIARY TABLE V.

Distribution of the infirm by age per 10,000 of each sex at each of the last three Censuses.

Age	INSANE						DEAF-MUTE					
	Males			Females			Males			Females		
	1901	1891	1881	1901	1891	1881	1901	1891	1881	1901	1891	1881
	2	3	4	5	6	7	8	9	10	11	12	13
Total	10 000	10 000	10,000	10 000	10,000	10,000	10,000	10,000	10 000	10 000	10 000	10 000
0-5	150	170	181	196	183	218	110	453	121	486	532	513
5-10	582	588	669	633	567	652	1,484	1,420	1,209	1,518	1,439	1,271
10-15	921	820	898	954	820	883	1,621	1,310	1,295	1,525	1,152	1,183
15-20	928	845	990	1,013	967	1,007	1,270	1,078	963	1,211	1,029	884
20-25	1,027	1,051	2,204	1,012	1,011	1,867	999	969	1,733	976	953	1,580
25-30	1,217	1,232		968	990		982	896		888	862	
30-35	1,232	1,263	2,065	1,103	1,103	1,788	858	821	1,427	870	871	1,288
35-40	989	953		798	863		515	605		501	518	
40-45	962	986	1,433	1,001	971	1,500	580	623	1,074	590	630	1,069
45-50	572	560		537	592		317	379		313	366	
50-55	576	563	833	665	719	1,031	317	456	795	397	485	893
55-60	216	278		271	317		139	346		119	250	
60 and over	598	588	737	816	897	1,054	418	738	1,015	546	951	1,316

Age	BLIND						LEPER					
	Males			Females			Males			Females		
	1901	1891	1881	1901	1891	1881	1901	1891	1881	1901	1891	1881
	2	3	4	5	6	7	8	9	10	11	12	13
Total	10,000	10,000	10,000	10,000	10,000	10 000	10 000	10 000	10 000	10 000	10 000	10 000
0-5	703	411	07	211	277	2 6	46	45	47	100	92	98
5-10	585	648	618	385	115	394	108	89	129	206	196	217
10-15	692	642	651	418	111	394	271	249	273	156	121	112
15-20	575	588	552	410	109	574	418	106	151	662	625	617
20-25	601	607	1,156	158	419	889	581	586	1,115	781	735	1,620
25-30	665	632		520	517		911	877		920	926	
30-35	696	662	1,143	611	620	1,040	1,220	1,202	2,379	1,116	1,188	2,012
35-40	541	560		506	535		1,159	1,209		930	998	
40-45	751	698	1,184	822	753	1,252	1,511	1,522	2,314	1,291	1,296	1,937
45-50	519	564		522	584		980	998		752	776	
50-55	866	749	1,375	1,027	889	1,569	1,187	1,163	1,630	1,081	991	1,498
55-60	453	628		487	698		183	493		120	457	
60 and over	2,750	2,610	3,011	3,563	3,445	3,882	1,122	1,170	1,252	1,219	1,299	1,509

SUBSIDIARY TABLE VI.

Distribution of the Insane by age in each province and state.

PROVINCE, STATE OR AGENCY	NUMBER PER 100 INSANE WHO ARE AGED									
	0-10		10-20		20-40		40-60		60 and over	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11
INDIA	7	8	18	20	45	39	24	25	6	8
Provinces.	7	8	18	20	45	39	24	25	6	8
Ajmer-Merwara	8	...	30	20	32	40	25	30	5	10
Assam	5	8	17	19	40	44	24	22	5	7
Bengal	6	8	18	19	46	39	24	25	6	9
Berar	10	10	29	24	43	41	16	23	2	2
Bombay	8	10	19	23	44	37	23	23	6	7
Burma	4	4	15	16	47	39	26	29	8	12
Central Provinces	9	10	22	27	42	36	23	22	4	5
Madras	6	6	15	16	47	41	27	29	5	8
N-W. F. Province and Punjab	10	11	24	25	41	37	18	19	7	8
United Provinces	7	9	17	18	44	38	26	27	6	8
States and Agencies.	9	11	20	20	42	38	23	23	6	8
Baroda State	6	4	13	26	52	38	26	23	3	9
Bengal States	13	11	24	26	43	40	16	18	4	5
Bombay States	11	11	24	28	41	39	21	20	3	2
Central India Agency	8	8	16	21	43	42	25	24	8	5
Central Provinces States	15	20	23	22	43	32	16	21	3	5
Hyderabad State	6	11	12	18	44	48	32	19	6	4
Kashmir State	17	20	25	24	37	32	13	15	8	9
Madras States	1	3	9	7	48	44	34	39	8	7
Mysore State	5	8	16	19	44	40	30	27	5	6
Punjab States	9	11	25	21	39	39	21	19	6	10
Rajputana Agency	8	13	16	13	41	35	26	26	9	13
United Provinces States . . . . .	.	7	2	20	49	33	39	30	10	10

SUBSIDIARY TABLE VII.

Actual Variation in the number of the blind at each age-period in some of the main provinces.

Age	INDIA			BENGAL			UNITED PROVINCES			MADRAS		
	1891	1901	Variation + or -	1891	1901	Variation + or -	1891	1901	Variation + or -	1891	1901	Variation + or -
1	2	3	4	5	6	7	8	9	10	11	12	13
0-5 .	15,794	9,129	-6,665	2,418	2,211	-207	4,674	2,228	-2,446	1,312	936	-376
5-10 .	24,357	17,241	-7,116	3,870	3,808	-62	6,733	3,947	-2,786	2,002	1,795	-207
10-15 .	24,279	20,258	-4,021	3,791	4,037	+246	7,077	5,208	-1,869	1,767	2,134	+367
15-20 .	22,846	17,498	-5,353	3,368	3,641	+273	6,080	4,658	-1,422	1,534	1,650	-116
20-25 .	24,203	18,799	-5,404	3,141	3,477	+336	6,971	5,095	-1,876	2,183	1,907	-276
25-30 .	26,332	21,014	-5,318	3,599	3,963	+364	7,109	5,624	-1,485	1,866	1,869	+3
30-35 .	29,373	23,677	-5,696	4,149	4,124	-25	8,644	6,268	-2,376	2,384	2,396	+12
35-40 .	25,092	18,543	-6,549	3,588	3,522	-66	5,821	4,551	-1,270	1,715	1,741	+26
40-45 .	33,259	27,864	-5,395	5,000	4,698	-302	9,290	7,068	-2,222	2,702	2,634	-68
45-50 .	26,308	18,414	-7,894	3,613	3,564	-49	4,969	4,396	-573	1,650	1,596	-54
50-55 .	37,541	33,429	-4,112	5,819	5,721	-98	10,385	8,209	-2,176	2,932	3,181	+249
55-60 .	30,272	16,621	-13,651	3,834	3,414	-420	4,136	3,565	-571	1,607	1,446	-161
60 and over	138,771	111,100	-27,671	23,707	21,740	-1,967	29,150	21,538	-7,612	12,393	10,726	-1,667
Unspecified	441	222	-219	164	.	-164	.	201	+201	77	...	-77
Total	458,868	354,104	-104,764	70,056	67,915	-2,141	111,039	82,551	-28,488	36,424	34,017	-2,407

Age	BOMBAY			PUNJAB			BURMA			CENTRAL PROVINCES			ASSAM		
	1891	1901	Variation + or -	1891	1901	Variation + or -	1891	1901	Variation + or -	1891	1901	Variation + or -	1891	1901	Variation + or -
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
0-5 .	1,062	453	-609	2,006	1,025	-981	294	241	-53	655	305	-350	192	195	+3
5-10 .	1,432	874	-558	3,025	2,587	-438	396	345	-51	900	693	-207	284	311	+27
10-15 .	1,396	1,032	-364	3,166	2,842	-324	539	411	-128	1,070	1,011	-59	276	300	+24
15-20 .	1,313	832	-481	4,008	2,653	-1,355	537	425	-112	816	734	-82	237	231	-6
20-25 .	1,602	894	-708	3,446	2,738	-708	531	579	+48	934	904	-30	256	254	-2
25-30 .	1,763	1,059	-704	4,347	3,247	-1,100	511	486	-25	1,149	1,100	-49	249	299	+50
30-35 .	1,931	1,181	-750	3,390	3,860	+470	682	605	-77	1,462	1,280	-182	295	329	+34
35-40 .	1,554	1,068	-486	5,302	2,990	-2,312	654	584	-70	903	1,013	+110	252	288	+36
40-45 .	2,264	1,361	-903	3,248	5,154	+1,906	876	726	-150	1,734	1,573	-161	457	460	+3
45-50 .	1,434	1,004	-430	7,401	3,356	-4,045	806	662	-144	860	967	+107	258	331	+73
50-55 .	2,518	1,540	-978	3,425	6,849	+3,424	1,228	963	-265	1,737	1,807	+70	528	577	+49
55-60 .	1,286	841	-445	11,492	3,495	-7,997	1,091	769	-322	512	594	+82	239	237	-2
60 and over	8,544	4,148	-4,396	19,129	28,421	+9,292	7,089	4,726	-2,363	5,785	5,026	-759	2,309	1,947	-362
Unspecified	.	17	+17	.	1	+1	.	.	.	...	.	.	..	...	..
Total	28,099	16,304	-11,795	73,385	69,218	-4,167	15,234	11,522	-3,712	18,567	17,007	-1,560	5,831	5,759	-72

SUBSIDIARY TABLE VIII.

Proportion of deaf-mutes at the higher ages in each province and state.

1 PROVINCE, STATE OR AGENCY	NUMBER OF DEAF-MUTES PER 100,000 (BOTH SEXES)								
	Total population			Aged 50-60				Aged 60 and over	
	1901	1891	1881	1901	1891	1881	1901	1891	1881
1	2	3	4	5	6	7	8	9	10
INDIA.	52	75	85	43	91	119	49	119	183
Province.	57	79	88	45	94	118	49	122	186
Ajmer-Merwar.	23	32	71	28	48	144	40	68	221
Andamans	37	6	..	..	..	..	..	..	..
Assam	75	86	53	75	65	101	99	63	171
Baluchistan	18	33	..	..	240	..	..	..	..
Bengal	69	91	123	51	138	173	52	178	289
Bihar	40	18	93	24	17	159	18	36	310
Bombay	58	61	72	37	61	91	45	71	149
Burma	27	51	61	36	63	88	47	103	114
Central Provinces	47	51	68	36	67	121	54	86	216
Cooch	54	73	98	..	78	119	59	22	117
Madras	64	76	51	36	69	34	27	82	41
N-W F Province and Punjab	78	97	114	67	107	129	92	147	183
United Provinces	37	71	62	40	79	69	39	104	122
State and Agency.	35	56	68	35	71	119	52	98	162
Baroda State	35	38	78	56	53	172	78	84	279
Bengal States	49	75	..	33	139	..	39	178	..
Bombay States	31	58	68	31	76	103	35	93	158
Central India Agency	16	..	..	25	..	..	34	..	..
Central Provinces States	35	45	..	23	55	..	25	71	..
Hyderabad State	6	38	39	4	47	103	10	64	73
Kashmir State	115	..	..	120	..	..	167	..	..
Madras States	41	42	..	45	42	..	60	71	..
Cochin State	69	55	..	73	75	..	115	129	..
Travancore State	27	29	..	36	36	..	47	58	..
Myore State	55	69	62	33	79	72	21	154	104
Punjab States	87	97	142	95	118	188	142	177	340
Rajputana Agency	15	..	..	29	..	..	52	..	..
United Provinces States	52	50	110	40	57	132	51	33	240

CHAPTER V

Education.

Introductory Remarks.

264 At previous enumerations the population was, in respect of education, divided into three categories—literate, learning and illiterate. The instructions then issued were as follows.—

Enter against each person, whether grown-up, child or infant, either learning, literate or illiterate. Enter all those as “learning” who are under instruction, either at home or at school or college. Enter as “literate” those who are able both to read and write any language, but who are not under instruction as above. Enter as “illiterate” those who are not under instruction, and who do not know how to both read and write, or who can read but not write, or who can sign their own name, but not read.

It was found that the return of the learning was vitiated by the omission at the one end of boys in the rudimentary stages of instruction, and at the other, of many of the more advanced students, who thought it derogatory to their dignity to call themselves “learning” when people of far lower attainments were recorded as “literate”, and accordingly caused themselves to be entered under the latter head. There was a considerable discrepancy between the census figures for the “learning” and those of the Education Department, due partly to the causes noted above, and partly, it was alleged, to an exaggeration in the departmental returns of the number of children under instruction in elementary village schools. For these reasons it was thought better to leave the compilation of statistics regarding persons under instruction to the educational authorities, and to confine the information collected at the census to the broad question whether a person can or cannot both read and write*. The rule for the guidance of the enumerators was accordingly modified on the present occasion as follows—

Enter against all persons, of whatever age, whether they can or cannot both read and write any language.

At the present census, therefore, the population has been divided into two broad classes, the literate and the illiterate. Literacy has been defined to mean the ability to *both* read and write, it thus excludes two fairly numerous groups, *viz* on the one hand, those who, though unable to write, can spell out the words of a book, usually of a semi-religious nature, with whose contents they are already fairly familiar and, on the other, those whose calligraphic attainments extend only to the scrawling of their own name, these are chiefly messengers and other menials, but there is also a fair sprinkling of such persons in a higher station of life. In cases where a person was shown as literate, the main language which he was able to read and write was entered and it was also stated if he was literate in English.

265 The information thus recorded has been embodied in Imperial Tables VIII and IX. In the former the literate are distributed by age and religion, and in the latter, according to caste. In both, the statistics of literacy in English are given. In the provincial series of tables details will also be found of the number literate in each of the main provincial vernaculars, *e.g.*, Bengali, Hindi† and Oriya in Bengal, Urdu and Hindi in the United Provinces,‡ Urdu, Hindi, Gurmukhi, Tibetan, Tankri and Mahajani in the Punjab, and Tamil, Telugu, Malayalam and Canarese in Madras. In the general tables for the whole of India the only distinction made is between “main provincial vernaculars” and “other languages”. It was impossible in these tables to reproduce the full details, partly on account of considerations of space and partly because the figures would not be complete, as languages, which in some provinces have been treated separately, have been grouped under the head “other languages” in tracts where they are of little local importance. This branch of the subject will, therefore, be omitted from the

* In his Report on the Census of India in 1891, Mr. James recommended the abandonment of the distinction between those under instruction and those able to read and write, but no longer in a state of pupilage.

† Hindi is here used in its broad popular sense and not in the narrower meaning assigned to the term by philologists.

‡ The question was here of special importance in connection with the rival claims of each language, of a rather character, to be recognised in the courts, and the Superintendent therefore tabulated not only the number of persons literate in each separately, and in both, but he distinguished the latter according to which of the two characters was the better known.

general review of the statistics, but it will be referred to in the discussion, in the latter part of this chapter, of the results in individual provinces and states.

Proportional figures illustrating the more important features of the return are, as usual, embodied in subsidiary tables, which will be found at the end of the chapter, *viz.* :—

- I.—Education by age, sex and religion
- II.—Education by age, sex and locality
- III.—Education by religion, sex and locality
- IV.—English Education by age, sex and locality.
- V.—Progress of Education since 1881 by locality.
- VI.—Education by selected castes
- VII.—Results of the University Examinations in 1891 and 1901.
- VIII.—Number of institutions and pupils in 1891 and 1901, according to the returns of the Education Department

General Review.

Extent of
literacy

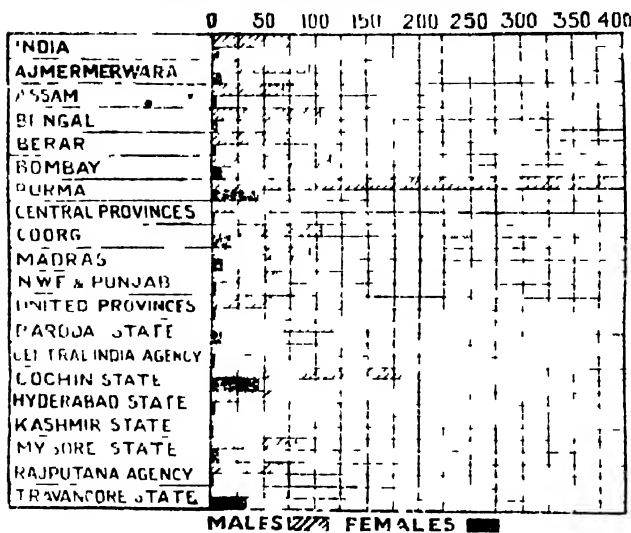
266 Of the total population of India only 53 persons per mille are literate in the limited sense in which this term was used at the census. One male in every 10 can read and write and one female in 141. There would thus appear to be 14 literate males to 1 literate female, but it is possible that there has been some understatement in respect of the latter sex, as amongst some classes of the population there is a prejudice against admitting that women are thus qualified. Taking males only we find that under the age of 10 only 13 per mille have been returned as literate, the proportion rises to 85 per mille between the ages 10 and 15, to 132 between 15 and 20, and to 139 at '20 and over'. This steady increase at successive age-periods seems to show that, in spite of the instructions, the general tendency of the enumerators was to omit from the category of the literate persons who were still under instruction, even though they had passed beyond the preliminary stage of their education. The number of persons who first learn to read and write after attaining the age of 15 is infinitesimal, and unless (which is very unlikely) the persons enumerated at the age-period '15 to 20' have enjoyed fewer educational opportunities than did those enumerated at all the higher ages when they passed through this period of life, the proportion of the literate amongst the former would be greater than, or at least equal to, the corresponding proportion at the higher ages. In 1891, when the learning were shown separately, special care was taken to prevent persons properly falling under the latter head from being entered as literate, and those of our census staff who had already been employed on that occasion may, in some cases, have been influenced by the rules which were then laid down for their guidance. The total number of literate males under 15 years of age, is 2,129,439 compared with 675,357 literate and 2,518,210 learning at the same age-period in 1891, a decrease of 33 per cent. The only tract where a general standard of what should be held to constitute literacy was laid down, was the Central Provinces where it was ruled that only those persons who had passed the Upper Primary Examination or possessed equivalent educational qualifications should be treated as literate. In spite of this, the proportion of persons returned as literate shows a better result there than in most places, in comparison with 1891, and this helps to confirm the view that the general standard of literacy adopted by the census staff was higher than would be expected from the wording of the rule.

There is no doubt that many learners have been left out of account, but that their exclusion is far from complete is clear from the fact that in 1891, when they were shown separately, the persons returned as "literate" under 15 years of age formed less than 6 per cent. of the total literate population, and the proportion has now risen to over 15 per cent. It is impossible to say exactly how far learners have been included or omitted, but it would seem that the method of dealing with them has varied in different localities, and in Berar, Bombay, the Central Provinces and two or three Native States, the proportion of persons who have been returned as literate at '15 to 20' is higher than that at '20 and over'. This is also the case in respect of females in all provinces, but here it is probably due to the greater progress which female education has made during the decade, as compared with that of males, and to the relatively larger proportion which the literate, including learners, at the former age bears to that at the latter. The same circumstance might possibly account for the proportions in respect of males

in Berar and the Central Provinces. In Bombay, however, the proportion of literate males over 15 years of age is no greater than that of the literate *plus* learners in 1891, whereas in Bengal a considerable improvement in this proportion has been recorded, in spite of the fact that the present proportion of the literate at the age '15 to 20' is less than that at '20 and over', it would therefore seem that learners in this province have been more sparingly classed as literate than was the case in Bombay

267 Of the larger British provinces, Burma easily holds the first place in respect of literacy, as defined at the census; and no less than 378 per 1,000 of its male, and 145 of its female, population are able to read and write. This province enjoys an elaborate system of indigenous free education, which is imparted by the *pōngyis* or Buddhist monks attached to the monasteries, while the instruction of females is not hampered by the prejudices in favour of their seclusion when they approach the age of puberty which so greatly impede progress in other parts of India. Madras stands next to Burma, with scarcely a third of the proportion of literate persons returned in that province,

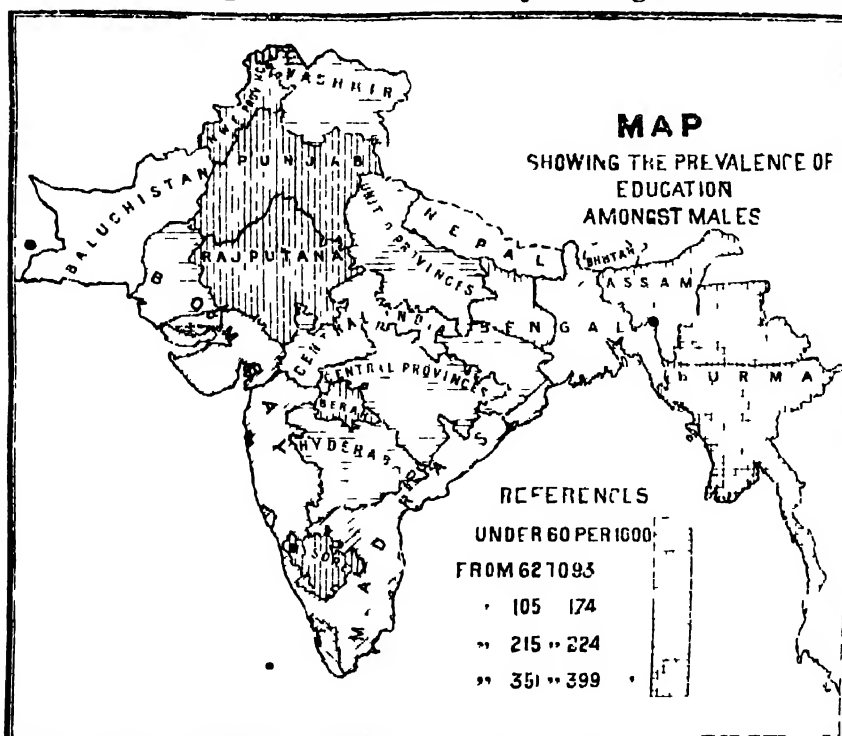
Diagram showing the number of persons per 1,000 in each Province who are literate



then follow Bombay and Bengal, and then, at a considerable distance, Assam, the Punjab, the United Provinces, and the Central Provinces. In the matter of education, as in many other respects, the four sub-provinces of Bengal present very divergent results, and if Bengal proper, with its population of 41 millions, be considered separately, it will be found to rank second only to Burma, Orissa follows close on Madras and Bihar stands above the Punjab, while Chota Nagpur takes rank below the Central Provinces

The Native States, taken as a whole, have only 79 males and 6 females who are literate per 1,000 of each sex, but Cochin, Travancore and Baroda occupy a higher position than any British province except Burma, while in respect of females, Cochin divides with Burma the honours of first place. The poorest results recorded in any part of India are found in the returns for Kashmir where only 38 males and 1 female per mille have been reported to possess the slight educational qualifications recognised by the census

268 The prevalence of literacy amongst males is shown in the accompanying map



NOTE.—For the purpose of this map the four sub-provinces of Bengal, and Lower and Upper Burma are dealt with separately and Sind is distinguished from the rest of the Bombay Presidency

It will be noticed that in almost all cases the proportion is highest in areas which lie along the coast, and that it gradually diminishes as one proceeds inland. The only marked exception is in the case of Upper Burma. It is also worthy of note that in the north-west of India, where the Aryan element in the population is believed to be strongest, the people are far more ignorant than in the east and south where the Mongoloid and Dravidian races

predominate. It will be seen in paragraph 270, that in large cities the people are better educated than in rural areas, but in other respects there seems to be no connection between the spread of education and the density of the population. The most thickly peopled tracts in the whole of India are to be found in Bihar and the United Provinces, but from the point of view of education these tracts are very backward. Bengal proper, which also carries a dense population, occupies a better position, but it is not nearly so advanced as Burma which is very sparsely inhabited. In Rajputana the State of Jaisalmer, with only 5 persons to the square mile, has double the proportion of literate persons that is found in Dholpur which has 235 to the square mile.

Females

269 The distribution of education amongst females is somewhat curious. It is not difficult to understand why the Burmese female, with her freedom from the prejudices which lead to her seclusion elsewhere, should be comparatively well educated, but it is less easy to see why the proportion should also be relatively very high in Cochin and Travancore; it is due in part to the large Native Christian population, but even excluding Christians, it is still much higher in these two States than in any other part of India outside Burma.

In Madras as a whole 11 females per mille are literate, but if the figures for Cochin and Travancore be excluded, the proportion falls to 9, the same as in Bombay, compared with 8 in Baroda and Mysore, 5 in Bengal (8 in Bengal proper), 4 in Assam, 3 in the Central India Agency, Berar, the Punjab and Hyderabad, and smaller proportions elsewhere.

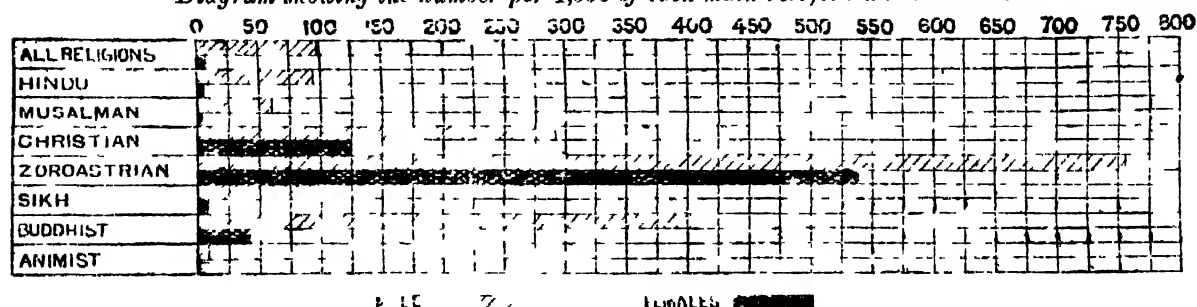
Education in cities

Province or State	NUMBER OF LITERATE PERSONS PER 1,000 OF EACH SEX			
	TOTAL POPULATION		CITIES	
	Males	Females	Males	Females
1	2	3	4	5
India	98	7	259	49
Bengal	104	5	276	63
Bombay	116	9	261	63
Burma	378	45	469	188
Madras	119	9	355	65
Punjab	64	3	185	27
United Provinces	57	2	176	20
Hyderabad	55	3	242	34
Mysore	93	8	304	70

rural areas, and the special table for cities shows that 259 males and 49 females per mille can read and write, compared with only 98 males and 7 females in the country as a whole. The reasons for this are obvious. The cities are not only great centres of trade and industry, but they are also, in many cases, the home of higher education, and contain colleges and advanced schools to which students from other parts resort in large numbers.

In some parts, moreover, the educated and leisured classes show a preference for city life and frequently have a town-house where they reside for the whole, or a great part of the, year. The presence of the Government and the High Court further raises the proportion of the literate in cities which are the capitals of provinces.

Diagram showing the number per 1,000 of each main religion who are literate



Education by religion

271 Turning to the statistics of education by religion, we find that the best results are shown by the Zoroastrians or Parsis, nearly two-thirds of whom are able to read and write, the proportion being three-quarters in the case of males and more than half in that of females. The highest proportion is at the age '15 to 20', where 91 per cent. of the males and 79 per cent. of the females have been returned as literate, and it would thus seem that the community is still progressing, and that at the next census the number who are altogether uneducated will be even smaller than it is now. The Jains come next with 25 per

cent of their community (males 47, and females 2, per cent) returned as literate, and then the Buddhists with 22 (40 males and 4 females). The followers of this religion are found mainly in Burma where every monastery is a centre of instruction for the children of the neighbourhood. The Christians follow closely on the Buddhists, but in their case the figures (males 29, and females 13, per cent) are a compound of a very high degree of literacy amongst Europeans and Eurasians and of a lower one amongst the native converts, many of whom are recruited from amongst the most ignorant sections of the community. The statistics of literacy amongst Native Christians taken by themselves have not been worked out for all provinces, but where figures are available, it is found that they enjoy a far greater degree of education than the other religious communities not yet mentioned. A long gap intervenes between the Christians and the Sikhs, who have 98 literate males and 7 literate females per 1,000 of each sex, or exactly the same proportions as in India as a whole. Among the Hindus ability to read and write is slightly less widespread than among the Sikhs, but more so by .1 per cent. than it is amongst the Muhammadans; the latter, like the Christians, include in their ranks a high proportion of converts from the lower grades of Hinduism, whose Hindu congeners are doubtless every whit as ignorant as they are. The general position of the Muhammadans is determined by the figures for Bengal and the Punjab where the bulk of them are found; in the United Provinces the proportions approach equality, while in Madras and the whole of the intervening area, including Mysore, Hyderabad, Berar, the Central Provinces and Central India, they claim a larger proportion of persons able to read and write than do their Hindu neighbours. At the bottom of the list come the Animistic tribes who can boast of only 8 males per mille who are literate and practically no females.

272 The change of system already described, and the uncertainty as to the extent to which persons under instruction have been treated as literate, make it difficult to institute an effective comparison between the results of the present census and those of 1891. If we leave out of account altogether the persons shown as learning at previous censuses, we get a steady increase in the number of literate males per mille from 66 in 1881, to 87 in 1891, and 98 on the present occasion, the corresponding proportions for females being 3, 4 and 7. A comparison on this basis is, however, clearly defective, and, on the whole, the most satisfactory procedure seems to be to consider only persons over 15 years of age and, assuming that all persons over this age who would have been classed as 'learning' according to the rules of 1891 have on the present occasion been returned as 'literate,' to compare the literate of this age at the present census with the total of the learning and literate of the same age in 1891. The number of literate males aged '15 and over' is thus 12,560,032 or 138 per mille, compared with 11,357,996, or 141 per mille, ten years ago, and that of literate females 754,510, or 8 per mille, as against 175,842, or 6 per mille. There has been a large addition to the absolute number of literate persons of both sexes, but while the proportion which they bear to the total population for which the statistics of Education have been collected has risen by 2 per mille in the case of females, that for males has fallen by 3 per mille. This decrease, however, is only apparent and is due to the inclusion in the statistics of the present census of about 32 million persons in Central India, Kashmir, Rajputana and other backward tracts who were left out of account in 1891. Excluding these areas the proportion of literate males at the present census would be 144 per mille. Moreover, as already stated, the basis of comparison, though the best that can be adopted, is to some extent conjectural, and it is impossible to say with certainty how far the two sets of figures are really comparable. At the same time it must be admitted that the results are not so satisfactory as might have been expected in a country where there is so vast a field for improvement as there is in India, and it is, therefore, necessary to consider in some detail the causes which tend to retard progress, and the efforts which have been made to combat them. Meanwhile it may be noted that in respect of males, Bengal, Berar and the Central Provinces have improved their position since 1891, Bombay is stationary, and Burma, Madras, the Punjab and the United Provinces have fallen back, in the Native States progress is shown only by Baroda, Mysore and Travancore. In the case of females the proportional increase is high, but the absolute addition to the female literate population is very small and the total is still

extraordinarily low. If British territory only be taken into account the rise is from 6 to 9 per mille, an increase of 50 per cent. This result is due mainly to the improvement which has taken place in Burma (from 34 to 56 per mille), Bengal (from 4 to 7) and Bombay (from 7 to 10); smaller gains have been recorded in the other provinces also, except the Central Provinces which is stationary. In the Native States female literacy seems from the proportional figures to be less prevalent than it was ten years ago, but this is due to the inclusion in the returns of the statistics for certain backward areas not dealt with in 1891.

Causes of
general want
of progress

273. The causes of the general illiteracy prevailing in India are to be found in the history of the country and the social conditions of the people. Prior to the advent of the British, India had been, for centuries, the cockpit of contending dynasties, who looked solely to their own aggrandisement and seldom or never regarded the great body of their subjects in any other light than as the source from which money was to be squeezed for the maintenance of themselves, their courtiers and their armies. Some rulers took a greater share of the raiyats' produce than others, and occasionally large tracts were devastated by the troops of hostile armies, but in other respects the people were very little affected by the constant change of rulers. The idea that it was the duty of the monarch to govern for the good of his subjects was alien alike to Pathán, Moghal and Maráthá, and the tax collector was the only connecting link between the governor and the governed. Under such conditions, it is small wonder that the common people should have lived sunk in the deepest ignorance, with few thoughts beyond the provision for themselves and their families of the bare necessities of life, and that the knowledge of reading and writing should have been confined to those who depended on it for their livelihood, *i.e.*, to the priests, traders and accountants. The influence of caste, with its system of hereditary occupations, tended in the same direction; for not only were the learned professions the close monopoly of a few castes, but the imparting of knowledge to Sudras was strictly forbidden.

274. This was the state of things when the British acquired possession of India and its influence still continues. On the one hand we find a limited number of castes whose traditional occupations necessitate a knowledge of reading and writing, and on the other the great mass of the people, who live by agriculture or manual labour, who have for many generations been illiterate, who are regarded by the higher castes as unfit for education, and who are themselves indifferent to its advantages and can see no reason why their children should be sent to school or taught things of which they themselves are ignorant and in which they can perceive no practical use.*

The former class have always been alive to the necessity of educating their children and in former times they maintained their own schools or *páthshálas*. When the efforts of the State were directed towards the advancement of education, it was too often this class who reaped the benefit of the measures which were adopted, whether they took the shape of grants-in-aid to, and the improvement of the curriculum in, indigenous schools, which was the policy generally followed in Bengal, or the establishment of new schools under direct management, as has been the usual practice in Bombay. In provinces where caste feeling is strong the indigenous schools were maintained almost solely for pupils of the higher castes, and where they received State recognition there was still a tendency for these castes to monopolize them. Where new schools were established under direct management, they merely replaced those previously in existence and, for the most part, drew their pupils from the same class. The only castes that are willing, generally speaking, to pay for the education of their children are those belonging to the limited group already referred to. The castes at the bottom of the social scale are not only indifferent to the advantages of education, but they are also generally too poor to be able to set aside the sum required to meet the fees, even if they can spare their children

* It is sometimes alleged that the lower castes are mentally unfitted for the benefits of education, but for this statement there seems to be no justification. Generally speaking, it may be said that the only racial difference between low and high castes is that the latter often contain a greater infusion of Aryan blood, but it has been shown that the prevalence of literacy does not follow racial lines and that the North-West of India, where the Aryan element is strongest, is the most backward. Moreover many of the low castes of the present day once occupied a high position, and some of them, such as the Bhars, would appear, from the ruins ascribed to the period of their supremacy, to have possessed a high degree of civilization.

for the purpose and dispense with the help they receive from them in various ways, such as in herding their cattle, collecting fuel, etc *

There is, moreover, in some provinces a strong prejudice on the part of the higher castes against allowing their children to sit in the same building with children of low origin, and especially with those commonly regarded as unclean, and the teachers often object to admitting them or, if they admit them, make them sit in the verandah † This sentiment is especially strong in Southern India, where the views on the subject of pollution have been most fully developed, it is said to be gradually dying out, but it is still a factor to be reckoned with Its indirect effects are even more far-reaching, owing to the fact that the officers of the Education Department, with whom the decision practically rests as to the localities where new schools are to be opened and what grants-in-aid should be given, belong almost exclusively to the small privileged group of high castes. In Bengal, for example, excluding 44 Europeans and Eurasians, who are employed mainly in administrative appointments or in institutions where higher education is imparted, there are 137 officers of the Education Department, of whom no less than 111 are Bráhmans, Baidyas and Káyasths; only 9 are Muhammadans, 5 are Native Christians and 12 belong to other castes. The lower grades of the community are entirely unrepresented ‡

275 We have seen that the masses do not appreciate the benefits of education, they can ill afford to pay for the tuition of their children or even to spare them from their work at home, the children of castes regarded as unclean are not wanted in the ordinary schools, either by the teachers or by the other pupils, and the needs of the lower castes generally are apt to be overlooked by the subordinate inspecting officers of the Education Department In such circumstances it is not to be expected that they can be brought within reach of our system of instruction unless special treatment is meted out to them. That their indifference to education can be overcome if suitable steps are taken, is shown by the statistics of literacy amongst Native Christians, who in most provinces, in spite of their humble origin, claim a larger proportion of persons able to read and write than most Hindu castes. Here and there something has been done to encourage education amongst them, either by establishing special schools for impure castes and in backward localities, or by making grants for schools to missionary bodies working amongst forest and hill tribes, but attention has in the main been concentrated on the development of the general educational system by departmental agency, without reference to the castes of the pupils, and no special efforts have been made to attract those of medium or low social status § This, it would seem, is the main reason why, in spite of the constant attention that has been given in recent years to the diffusion of education, the results, as indicated by the census, have been so small

The above remarks refer primarily to the Hindus and to the tribes hovering on the outskirts of Hinduism, but they apply in the main with equal force to the rank and file of the Muhammadan community In their case, moreover, there is the further difficulty that the learning by heart of long passages from the Koran is considered more important than the acquisition of secular knowledge in the village school.

It is unnecessary to dilate at length on the difficulties attending the diffusion of education amongst females, as they are well known. In the case both of Hindus and Muhammadans it is the fashion to seclude young girls as soon as they approach the age of puberty, and there is a strong general prejudice, not only against allowing them to go to school, but also against permitting them to be taught at home These scruples are slowly giving way amongst certain sections

* There are exceptions, and some castes, such as the Sháhás of Bengal, which are held in low estimation socially, have attained a relatively high position in respect of education, but the number of such cases is limited. It should be added that in the Punjab children of agriculturists are exempted from the payment of fees and in several other provinces a liberal scale of exemptions is allowed in favour of the children of poor parents.

† Cases are by no means rare where the efforts made to enforce an equality of treatment for the depressed castes have led to large schools remaining closed for years and even to disturbances of the peace and the destruction by fire of the crops and huts of the people belonging to these castes.

‡ Bengal Census Report, page 486

§ In Bengal proper the twice-born castes form only 12.8 of the total Hindu population and the clean Sudras only 16.4 per cent. In Madras 5.7 per cent of the population rank as twice-born and 31 per cent. as clean Sudras, the remaining 63.3 per cent. are all more or less unclean. The measures adopted in Madras for encouraging education amongst the depressed castes (or Panchamas as they are called locally), described on page 353 of Mr J. S. Cotton's Report on the Progress of Education in India, 1892-93 to 1896-97, represent the most important step yet taken in the direction of providing education for the lower classes. But the number of pupils, 69,461 in 1891-92) is still small compared with the total strength of the castes in question.

of the community, and societies are being formed, not only in connection with Christian missions, but also amongst the people themselves, for imparting instruction in the zenanas. In this way the females of the upper classes are gradually being brought within the reach of knowledge, and a foundation is being laid, upon which it may be hoped that in time a far more extensive edifice may be built.

Reference to
Statistics of
Education
Department

276. We have hitherto dealt with the question solely from the point of view of the census, but before leaving the subject, it will be interesting to refer briefly to the progress indicated by the returns of the Education Department. The two sets of statistics run of course on different lines, and while the latter treat only of persons actually under instruction, the census figures refer, as we have seen, mainly to those who have left school.

An abstract of the Departmental returns for each province will be found in

Class of Instruction	Number of Institutions		Number of scholars	
	1901	1891	1901	1891
Arts Colleges	141	105	16,703	12,165
Professional Colleges	44	31	4,851	3,421
Secondary Schools	5,461	4,967	586,628	468,069
Primary Schools	98,133	91,023	3,157,724	2,690,827
Training and other special Schools	961	571	83,924	70,389
Private Institutions	12,343	38,244	605,212	483,038

subsidary table No VIII, and the totals for the whole of British India are reproduced in the margin. Higher education has progressed rapidly, but the advance in respect of primary education, *i.e.*, the teaching of reading and writing and elementary arithmetic, has been slow, except in the United Provinces and the Central Provinces where, however, the apparent improvement is due mainly to the incorporation in the returns of schools already in existence, which were previously left out of account. The recognition of these schools will no doubt result in an improved system of teaching, but it seems doubtful if it will operate to any marked extent in increasing the number of persons to whom the rudiments of learning are conveyed. In Bengal there are now fewer primary schools than there were ten years ago, and although there are slightly more pupils, it has been said that the end of the track indicated by the indigenous *páthshálas* has been reached, and that the further extension of education and the instruction of the children of the lower classes is a problem of very great difficulty. In some parts, especially in Bihar, many of the higher castes are still very backward and there is ample scope for further improvement, but it is an undoubted fact that the classes whom the present system of education chiefly affects, form but a very small proportion of

the total population.

Expenditure
on primary
education

277. The expenditure on primary education in British provinces from provin-

Province	EXPENDITURE ON PRIMARY EDUCATION FROM PROVINCIAL AND LOCAL FUNDS		EXPENDITURE IN 1901	
	1901	1891	Per 1,000 of population	Per 1,000 pupils in public institutions
	Rs	Rs	Rs	Rs
Assam	1,71,980	1,19,968	28	1,931
Bengal	8,81,795	6,52,671	11	667
Bihar	2,07,701	1,89,568	76	4,955
Bombay	19,77,022	15,61,888	107	3,839
Burma	2,91,452	1,80,529	28	2,283
Central Provinces	3,22,978	2,14,619	33	2,706
Madras	9,48,787	7,45,451	25	1,526
Punjab	4,39,306	3,64,005	20	3,741
United Provinces	7,18,471	5,67,822	15	2,599
TOTAL	59,12,492	46,01,520	26	1,872

cial and local funds is noted in the margin. It would be misleading to distinguish the contributions from these two sources, as in many cases the local authority is simply an agent for administering a grant made by Government, and a great part of its disbursements is met by a countervailing allotment from Provincial revenues, which, however, is not specially ear-marked, and is shown in the public accounts merely as a grant to

the local authority concerned. The actual outlay, moreover, is considerably greater

than would appear from the figures, which do not include the salaries of the lower grades of the inspecting staff, who are almost wholly concerned with the supervision of primary schools. It may be added that the Government of India have recently made a series of grants to local Governments, amounting in the aggregate to 40 *lakhs*, for educational purposes, and have at the same time laid stress on the principle that primary education has a strong claim upon the sympathy of Government and should be made a leading charge upon the Provincial revenues. In these circumstances a great extension of the present system of primary schools may be looked for in the near future. It must also be borne in mind that the expenditure from provincial and local funds is supplemented by fees and voluntary subscriptions, and that if these be added the total expenditure is about twice as great as that shown in the above statement. The expenditure from all sources was Rs.91,29,887 in 1891 and Rs. 1,16,07,277 in 1901.

In proportion to its population by far the largest expenditure from provincial and local funds is incurred in Bombay, and the smallest in Bengal. In comparison with its disbursements, however, the largest number of pupils is to be found in the Bengal schools, which, being administered on the grant-in-aid system, cost the State far less than those of Bombay, where the schools are under direct management. The total expenditure on primary education has risen during the last decade by 28 per cent. Bombay has augmented its contributions by 4 *lakhs*, Bengal, Madras and the United Provinces by from 1½ to 2 *lakhs*, the Central Provinces and Burma by 1 *lakh* and the other three provinces by smaller amounts*.

278. If other things were equal, the facilities for education would depend on the distance which the children have to go in order to attend a school. The mean distance from one school to another (including private institutions) in each of the main provinces is noted in the margin.† For the purpose of this statement it is assumed that the schools are equally distributed over the whole area, which of course is not really the case. In Bengal, for example, they are unusually plentiful in the Metropolitan districts, but they are few and far between in Chota Nagpur and other

Province	Mean distance between each school in miles
Bengal	1.9
Madras	2.5
United Provinces	3.1
Burma	4.1
Assam	4.4
Berar	4.4
Bombay	4.4
Punjab	4.8
Central Provinces	7.6

outlying tracts. At the same time the arithmetical mean for a province affords a good indication of its position as compared with other provinces. It thus appears that, if all the schools in a province were equidistant, no child in Bengal would have to go more than a mile to reach one; in Madras and the United Provinces the maximum distance would be barely a mile and-a-half, and the Central Provinces is the only tract where it would much exceed two miles.

The order of the several provinces in respect of the relative prevalence of literacy differs very greatly from that shown in the above statement. The proportion of literate persons is more than three-and-a-half times as great in Burma, where there is no caste system and the schools are open to all alike, as it is in Bengal, although the schools in the former province are twice as far apart as in the latter. There is very little difference in the proportion of the literate between Madras and Bombay, or between the Central Provinces and the United Provinces, but in both cases there is a great difference in the mean distance between schools. The absence of any clear co-ordination between the two data confirms the view that the spread of education does not depend primarily on the multiplication of schools, and that there are large sections of the population who will remain ignorant, however many schools there may be, unless something more is done to attract them than has hitherto been attempted.

* It is not within the scope of this chapter to discuss the question of education generally, but I may perhaps be permitted to notice the very small proportion, even of those who attend school, who advance beyond the most elementary stage. Even in secondary schools a large proportion of the pupils are found in the lower classes which practically correspond to those of primary schools, and only four in 1,000 are reading in Arts or Professional Colleges.

† The calculation is based on the well-known formula $\log d = 1.031235 - \frac{\log}{2} n$, where n represents the number of schools in 100 square miles and d is the mean distance between them.

Comparison
of literate
population
with educa-
tion returns.

279. If the returns of the Education Department dealt with all schools in existence and were prepared everywhere on the same system, and if the proportion of pupils from year to year were fairly constant, it would be reasonable to expect a fairly uniform ratio in the different provinces between the

Province	No. of persons returning as literate per 100 pupils
Assam	208
Bombay	257
Central Provinces	257
Bengal	263
Berar	264
Madras	342
United Provinces	344
Punjab	377
Burma	724

number of pupils and the number of persons returned as literate. It will be seen, however, from the figures in the margin, that the actual proportion is far from uniform. The low position of Assam is easily explained by its large immigrant population, almost all of whom are unlettered, while the high rank of Burma is due to its numerous indigenous institutions which are outside the jurisdiction of the Department of Public Instruction. Excluding these two provinces, the others fall into two fairly homogeneous groups, *viz*, Bombay, the Central Provinces, Bengal and Berar with about 5 literate persons to every 2 pupils and Madras, the

United Provinces and the Punjab, with about 7 persons who can read and write to 2 under instruction. The reason for the difference is not altogether clear, but it may possibly be due to the fact that, in the latter group of provinces, more persons receive instruction in reading and writing either at home or in private institutions. We know that in Bengal almost all indigenous schools have been brought on to the books of the Education Department, while in Upper India, many of the trading castes at least, teach their children privately. At the same time the proportion of the literate to the learning in the first mentioned group seems very small and, if correct, can only be explained on the hypothesis that many of those who go to school fail to derive much benefit from their studies and either leave before they can read and write fluently or else, by want of practice, again forget what they have learnt.

Education by
Caste

280 The table showing education by caste was an optional one, and even where it was prepared, the general procedure was to work out the statistics only for certain selected castes. The whole or nearly the whole Hindu population was dealt with in the Central Provinces, Mysore and Baroda, nearly three-quarters in Bengal, and nearly two-fifths in Madras, but elsewhere the scope of the table was much more restricted, and in the Punjab and several other provinces and states it was not prepared at all. In Table IX for the whole of India the field is even narrower, and only a few of the typical castes dealt with in the corresponding Tables of the provincial series have been included. In these circumstances it is not possible to give figures for the whole country, and it must here suffice to mention briefly the general results. Further details will be found in the notes on the statistics for individual provinces and states to which the concluding part of this chapter will be devoted.

The most noticeable feature of the return is that everywhere the professional and trading castes take the lead. The proportions vary in different tracts, and high castes in one area may be more backward, from the point of view of literacy, than castes of far lower rank elsewhere. For example the Bābhans and Rājputs of Bihar are outstripped in the race for education by the Chāsī Kairārtas of Bengal proper. But in any given area the general rule is that, if the divisions are not too minute, the degree of education varies directly with the social position of the caste. The Brāhman does not always stand first. In Madras he does so, but in Bengal proper he is headed by the Baidya, in Bombay by the Vāni and Prabhu, and in Central India by the Mahesri. Nowhere, however, is he surpassed by any caste of the same locality which does not claim a twice born origin. The other castes of this standing almost invariably possess a larger proportion of literate persons than any clean Sudra caste, the latter again rank higher in this respect than the unclean Sudras, and the unclean Sudras than those that are altogether outside the pale of Hindu society. There are occasional exceptions, where a caste, such as the Shāhā of Bengal, is far better educated than its social position would indicate; in such cases it is generally found that the community in question is at the present time more prosperous than its neighbours and claims a much better position than that assigned to it by the leaders of Hindu society.

281. Of the total population of India 68 males and 7 females in every 10,000 persons of each sex were returned as literate in English. This is inclusive of Europeans and Eurasians. If the Christian community be excluded, the proportions fall to 56 males and 1 female. The Christians, as a whole, including Native Christians, are, however, far surpassed by the Parsis, of whose males no less than two-fifths, and of whose females one-tenth, know English. The Jains and Hindus, who come next to the Christians, have a very low general average, but, as will be seen further on, some of the higher castes, such as the Baidyas of Bengal and the Prabhush of Bombay, possess a remarkable number of persons acquainted with this language. The Sikhs rank next to the Hindus in this respect and then come the Muhammadans and Buddhists. Amongst those who were returned as Animistic by religion, practically none know English.

Religion	NUMBER IN 10 000 WHO KNOW ENGLISH	
	Males	Females
Hindu	64	1
Jain	194	1
Musalman	32	
Christian	1,289	615
Parsi	1,075	961
Sikh	52	
Buddhist	24	1
Animist	2	

Excluding the minor political units, the study of English is most popular in Bombay where 112 males and 15 females are acquainted with it, compared with 90 males and 10 females in Madras and 89 males and 6 females in Bengal*. In Bengal proper the proportions are 138 and 9 respectively, but in the remaining sub-provinces they are lower than in any other part of British India, of which the United Provinces, with 35 males and 5 females, is the most backward. The Native States have generally a comparatively small English-knowing population, but this is not the case in Cochin, Travancore and Mysore.

Statistics of the number of persons acquainted with English were collected in 1891 only for those returned as 'literate' and not for the 'learning', and this must be borne in mind when comparing the proportions shown in subsidiary table No IV with those of the present census. Excluding persons shown as learning, only 36 males and 5 females per 10,000 of each sex were then returned as literate in English. The apparent proportion for males has thus nearly doubled during the decade, while that for females shows an increase of less than 50 per cent, but it is impossible to say to what extent the result is due to the difference in the system under which the figures were collected. The relatively more rapid spread of English education amongst males is due to the fact that in the case of females the total number of persons knowing English is so small that those who are European or Eurasian by race bulk much more largely in the total. The rate of increase amongst natives of the country is probably at least as great in the case of females as in that of males.

Main results by Provinces.

282. In Assam 209,252 males or 67 per 1,000 have been returned as literate, and 13,134 females or 4 per 1,000. The best results are found in the Surma Valley and in the Khási Hills, where the Welsh Calvinistic missionaries have done much in the cause of education, and the worst in the Naga and Garo Hills. In the Brahmaputra Valley the proportion of literate males ranges from 68 per mille in Kamrup to 49 in Goalpara, where it is lower than in the Lushai Hills, and is not nearly so high as in the adjoining portion of Bengal. Amongst males one Christian in three is literate, while for Hindus, Muhammadans and Animists the ratio is 1 in 11, 1 in 23 and 1 in 111 respectively.

The number of persons who know English is 21,511 or 4 per mille. In the case of the indigenous castes education is most widely diffused amongst the Brahmans and Káyasths with 517 and 471 literate males per 1,000 respectively. The Sháhás and Ganaks with 355 and 282 come next, and then the Native Christians with 271. No other caste can claim more than 121 per mille and no aboriginal tribe except the Khási has more than 25, while the majority have less than a dozen. In respect of females the Native Christian community, with 176 who are literate per mille, heads the list, then come the Káyasths with 56 and the

Bráhmans with 27; only three other castes, including the Khásis, have 10 or more; one has 7 and two 5, and all the rest have 3 or less

Of the total literate population nearly two-thirds returned Bengali, and rather more than a quarter, Assamese, as the language which they could read and write

If we take as the basis of comparison with 1891 the number of literate persons aged 15 and over, and treat the learning of 1891 as literate, we find that literacy is slightly less prevalent than it was at the previous census, a decline of 6 per mille amongst males being only partially met by a rise of 3 per mille amongst females. This is attributed by Mr. Allen to the disturbing influence of ignorant immigrants, who have increased in number more rapidly than the indigenous population, which, in some districts, is considerably less now than it was ten years ago. The accuracy of the tabulation is not altogether free from suspicion, and it is possible that entries of 'literate' were occasionally overlooked, either when the slips were prepared or when they were being sorted.*

Bengal

283 The number of literate persons in Bengal, including its Native States, is 4,307,474 or 55 per mille. The proportion per 1,000 males is 104 compared with only 5 per 1,000 females. It has already been stated that the figures vary greatly in each of the four sub-provinces, and while the number of literate males per mille is 128 in Bengal proper and 120 in Orissa, it is only 70 in Bihar and 49 in Chota Nagpur. In Bengal proper again the proportion is far higher in the metropolitan districts of Central and West Bengal—where it rises to 316 per mille in Calcutta and exceeds 200 in Howrah, Midnapore and the 24-Parganas—than it is in North Bengal where the ratio falls to 70 in Jalpaiguri and 64 in Rangpur. In Bihar the highest proportion is found in Patna (123) and the lowest in Champaran (45), while in Chota Nagpur it ranges between 77 in Manbhum and 16 in the Tributary States. The relative prevalence of female education corresponds, though on a far lower plane, with that amongst males, but the pre-eminence of Calcutta is much more marked; the proportion who are literate per mille is here 115 compared with only 14 in the two next districts, Hooghly and Darjeeling. In North Bihar only two females per mille can read and write, while in South Bihar, North Bengal and Chota Nagpur the proportion is 3 per mille.

The greatest amount of literacy is met with amongst the Christians, partly on account of the large foreign element, where the proportion of educated persons is very high, and partly because the missionaries do their utmost to give instruction to their converts. The success of their efforts will be apparent from the figures noted in the margin, showing for a few tribes the number who are literate per 1,000 amongst converts to Christianity, as compared with those who have retained their old Animistic beliefs.

Tribe	LITERATE PER 1,000 MALES	
	Christians	Other
Lepcha	141	29
Garo	115	3
Munla	68	7
Oráon	41	3
Santál	22	3

Next to the Christians, the proportion of the literate, both male and female, is highest amongst the Buddhists, but the difference between them and the Hindus is very slight. The Muhammadans are much more backward, and the proportion who can read and write is barely half as great as it is amongst Hindus. In every 1,000 males only 68 are literate, and in every 1,000 females only two. The disproportion is more marked in the case of literate persons under 15 than it is at the higher ages, and it would thus seem that the Hindus are increasing the lead which they already hold. The Animists, as might be expected, come last. Only eight males in 1,000 are literate, and there are scarcely any literate females.

284. The statistics of education by caste show that practically the whole Eurasian community can read and write. Amongst the castes native to the Province the Baidyas take the first place with a literate male population of 648 per mille, then follow the Káyasths with 560, the Karans with 528, the Subarnabanihs and Gandhabanihs with 519 and 510 respectively, the Águris with 493, and the Bráhmans with 467. The low position of the Bráhmans is due to the figures for Bihar, where only 273 per 1,000 males of this caste can read

* In one of two districts where the education statistics were worked out a second time, the number of literate persons was found to be 20,662 compared with 17,717 at the first working.

and write. In Bengal proper the proportion is 639 per mille. The educational status of the other high castes in Bihar is also low. The Khattris have 380 literate males per 1,000, but the Bábhans have only 166, and the Rájputs only 150. Compared with other Bihar castes these figures are fairly high, but they are exceeded in Bengal proper in the case of many castes of much lower rank. Amongst the Khandáits of Orissa about 1 male in 7 is able to read and write. Of the indigenous trading castes of Bihar the Barnawárs, with 285 males per mille who can read and write, occupy the highest place, and are followed by the Máhuris, Kasarwánis, Kalwárs and Rauniárs. Amongst the artizan castes of Bengal proper the Kánsári, Téli, and Mayrá take the highest place, while in Bihar the Halwái stands first. The race castes generally rank very low. Amongst the Muhammadans, the highest educational rank is held by the Saiads, Moghals and Patháns.

In respect of female education, the Baidya is *facile princeps*. More than one of his females in every four can read and write. Then follow Santáli Christians, Moghals, Subarnabaniks, Khattris, Káyasths, and Lepcha converts to Christianity. In the province as a whole only 26 female Brahmans per mille are literate, but in Bengal proper the proportion rises to 56. The position of the Káyasths also is improved, if only Bengal proper be considered, and here the proportion is nearly 80 per mille.

As in the case of female education, so also in respect of a knowledge of English, the Baidyas come easily first, with 303 males per mille who are literate in this language. The Subarnabaniks of Calcutta stand next with 268 and the Gandhabaniks with 175, and then the Káyasths with 132. The Bráhmans again hold a relatively low place, and only 74 per 1,000 know English. If, however, we take the Bráhmans of Bengal proper only, the proportion rises to 157, compared with 147 amongst the Káyasths of the same area. Amongst the lower castes, who form the great bulk of the population, there are practically none who are acquainted with English. Bengali is the language which two-thirds of the literate population can read and write, while Hindi claims rather more than a quarter and Oriya rather less than a tenth.

Taking only persons over 15 years of age and adding the learning of 1891 to the literate, we find that the actual number of literate males has increased during the decade by 15 per cent. The greatest proportional advance has been recorded in Orissa and the smallest in East Bengal where the increase in the number of literate persons has barely kept pace with the general growth of the population. In the case of females there has been an increase of 63 per cent. in the number able to read and write, but the proportion of such persons to the total female population is still very small.

285. The persons who are literate in Berar number 123,316 or 45 per 1,000 ^{Berar} of the total population; of these 118,958 or 85 per mille are males and 4,358 or 3 per mille are females. The three northern districts, Amraoti, Akola and Ellichpur, show the best results, and Wun in the south-east, the worst. Four-fifths of the total literate population returned Maráthi as the language which they were able to read and write. The Parsis as a community are the best educated, with 818 literate males per mille and 651 females. They are followed by the Christians with 600 and 518 respectively and the Jains with 462 and 9. The Muhammadans of this Province with 114 and 8 occupy a better position than the Hindus who have only 83 males and 2 females per 1,000 of each sex who are able to read and write. Amongst Hindu castes the Bráhmans occupy the first place, and next to them the Wánis, Rájputs and Kunbis. The Mahárs, Dhangars, Wanjaris, Gonds, Kolis, Korkus and Koláms are practically all illiterate. Fifty-six males and 4 females per 10,000 are acquainted with English. Compared with 1891, there has been an increase of 13 per cent. in the actual number of literate males aged 15 and over, and of 90 per cent. in that of females, and the proportions per 1,000 of each sex now stand at 111 and 3 respectively, as against 94 and 2 at the previous census.

286. There are 1,626,683 persons in the Bombay Presidency who are able ^{Bombay} to read and write, or 64 per mille. The proportion for males is 116 and for females 9 per mille. Excluding Bombay City, where the proportions are 249 and 95 respectively, the diffusion of education is greatest in Gujarát where there are 206 males and 16 females who are literate in every 1,000 of each sex, and in one district, Surat, the proportion of literate males (245 per mille) is almost as

great as in Bombay City. The most backward tract is Sind where the ratio falls to 49 males and 5 females per 1,000 of each sex; and the lowest figures of all are those for Thar and Párkar (18 males and no females). It is, however, to be noted that in spite of an increase of 12 per cent in the general population, the number of literate Musalmans in Sind has declined considerably since 1891, and in some districts the fall is so startling as to suggest the possibility of errors having crept in in the course of tabulation. It is scarcely credible that there should be only 2,705 literate Muhammadans in Karáchi, where there were 6,566 in 1891 or 389 in Thar and Párkar compared with 1,459 at the previous census. The Provincial Superintendent himself thinks that some mistake must have been made, but he did not apparently have the results tested by fresh tabulation. Of the various religious communities the Parsis head the list with 752 males and 542 females per mille able to read and write, and then the Christians and Jains with

Religion	NUMBER PER MILLE WHO ARE LITERATE	
	Males	Females
Parsi	752	542
Christian	380	203
Jain	490	27
Hindu	110	5
Musalman	73	5

rather less than half this ratio. The Hindus and Musalmans come last. The position of Christians is lower than it otherwise would have been, partly because of the large number of old converts to Roman Catholicism along the coast, who enjoy few educational facilities, and partly because of numerous conversions during the decade from the lower castes, who are generally illiterate.* The Jains of Gujarát or Marwar, who are for the most part Vánis or traders, show a much higher

standard of literacy than their co-religionists of the South Maráthá country who are mainly cultivators.

287 The caste with the largest proportion of literate males is the Váni with 776 per mille; it is followed by the Bráhmaṇ with 580 and the Prabhu with 474. The figure for Bráhmaṇs would be much higher, if those of Sind, who are notoriously ignorant, were excluded. The Maráthás, whose traditions are military rather than clerical, have only 59 per mille in Bombay proper and 43 in the Deccan, and the Maráthá Kunbis only 26. The Dheds or Mahárs, who are village menials, come at the bottom of the list with only 7 per mille. The general order is much the same in the case of females, but here the Prabhus take precedence of the Vánis.

The number of English literates in the whole Presidency is 165,785 or nearly twice the number returned in 1891. Of the total nearly 32,000 are Europeans, but even so, of the various religious communities, the Parsi is the one best acquainted with this language, which is more or less familiar to 1 in every 4 persons. The Christians come second with 1 in 5. Amongst the Jains 1 person in 110 knows English, amongst the Hindus 1 in 250 and amongst the Muhammadans 1 in 500. Of the Hindu castes the Prabhus have the highest proportion and English is known to 2 males in every 7; next come the Bráhmaṇs with 1 in 10 and the Vánis with 1 in 14. Of the Prabhu females 17 per mille know English; with the single exception of Bráhmaṇs no other selected caste can claim even 1 per mille. Forty-five per cent. of the literate population returned Gujaráti as their language, 33 per cent. Maráthi, 10 per cent. Kanaresc, and 5 per cent. Sindhi, the remaining 7 per cent. being divided between Hindostani and various other languages.

The proportion of literate males over 15 years of age is exactly the same as in 1891, while that of females has risen slightly. In view of the fact that the proportion of literate males at the age '15-20' is considerably greater than that at the higher ages, it would seem that education must be more widely diffused than it was ten years ago. We have seen that the present return for Sind is untrustworthy, and if that tract be excluded the proportion at the present census stands at 168 males and 11 females per mille compared with 160 and 8 respectively in 1891. The result disclosed by these figures seems more probable than that for the Presidency as a whole.

288 Although it possesses less than a third of the population of the Madras Presidency, Burma contains very nearly as many literate persons, viz., 2,223,962,

Burma.

* The number of Christians in the Bombay Presidency has risen by 29 per cent. since 1891.

of whom 1,997,074 are males and 226,888 are females; the proportional figures for the two sexes work out to 378 and 45 per mille respectively. In almost every village in the province there is a monastery where one of the principal duties of the presiding *pōngyi*, or Buddhist monk, is the instruction, free of charge, of the children belonging to the village. The standard of education is, however, very low—lower even than that in the primary schools recognized by the Education Department, and it is probable that if any test were applied higher than that imposed by the census, *i.e.*, than the mere ability to read and write, the influence of these monastic schools on the statistics would disappear, and Burma would hold a far lower position in comparison with other provinces than that which it occupies on the basis of the present statistics. So far as these statistics are concerned, the most advanced districts are those lying along the banks of the Irrawaddy, from Mandalay to its mouth, and the Upper Chindwin. In all these districts at least 2 males in every 5 are able to read and write, and in five of them, *viz*, Minbu, the Upper Chindwin, Shwebo, Magwe and Mandalay, more than half can do so. These five districts are all in Upper Burma, where the indigenous system of education is more complete, and the influence of the *pōngyis* is greater, than in Lower Burma. The figures for the latter part of the province are affected in two ways. On the one hand there are numerous immigrants from Upper Burma who help to raise the proportion of the literate, while, on the other, it contains many ignorant aliens who bring down the average. The latter are particularly numerous in Rangoon City, with the result that in that rising industrial centre there are fewer literate males than in any other part of the riparian tract described above.

The prevalence of education amongst females, which depends far more on State aid and encouragement, follows very different lines, and the proportion who can read and write is three times as great in Lower, as it is in Upper, Burma. In the former tract 1 in 15 is literate, Rangoon City taking the first place with 1 in 4, and Hanthawaddy the second, with 1 in 9, while in Upper Burma the general ratio is only 1 in 43, and the highest (in Minbu) is 1 in 28. The absence of all prejudices in favour of the seclusion of women which elsewhere operate so injuriously on the education of females is one of the main reasons why in this province the proportion who can read and write is higher than in any other part of India, Cochin only excepted.

289 Distributed by religion, education is most widely diffused amongst Christians whose literate population represents a ratio of 423 per 1,000 males and 243 per 1,000 females. The Buddhists with 410 and 44 respectively show almost equally good results for males, but in respect of female education their relative position is much lower; it is to be noted, however, that to the total number of literate females the Christians contribute only 16,732 compared with 202,688 who are Buddhists. The proportions for Hindus are slightly better than those for Muhammadans; in respect of females both communities present very similar figures to those for Buddhists, but the proportion of literate males is less than half as great. The Animists, as usual, take the lowest place, but with 48 literate males and 2 literate females per mille, they are not nearly so backward as the corresponding communities in India proper. Of the indigenous races the Burman stands easily first with 490 males and 55 females per mille who are able to read and write. The Talaings, their former rivals in the struggle for the political supremacy, come next with 357 and 62, then follow the Karens and Shans with less than half these proportions, the Chins with 48 and 2 and, last of all, the Kachins with 14 and 2 per mille.

More than 93 per cent. of those able to read and write claimed Burmese as their language; only 1 per cent. returned Shan, and an even smaller number Karen and Talaing.

In comparison with 1891 the proportion of male literates over 15 years of age has fallen from 603 to 529 per mille. This is due mainly to the inclusion in the present returns of the figures for an extensive area, not dealt with in 1891, in which the ratio of educated persons is very low. If the Chin Hills and Shan States be left out of account the ratio for the present census rises to 583. This is still slightly lower than in 1891, but the difference is explained by the growth of the ignorant coolie population from Bengal and Madras. The number of females who can read and write has risen from 34 to 56 per mille, or to 63 if the newly enumerated areas in Upper Burma be left out of the calculation. The

knowledge of English is not commensurate with that of the vernacular languages and in this respect Burma holds a low place compared with the other large provinces. Only 61 males and 13 females per 10,000 of each sex can read and write this language.

Central
Provinces

290 From the educational point of view the Central Provinces is, next to Kashmir, the most backward tract in the whole of India. Only 54 males and 2 females per 1,000 of each sex have been returned as literate. In British districts the proportions are slightly better than the provincial average, *viz.*, 58 and 2, compared with 32 and 1 in the Native States. In British territory again, the Jubbulpore and Nerbudda divisions are more advanced than those of Nagpur and Chattisgarh. The highest ratio of literate males is found in the Nimar district (112 per mille) and that of females in Nagpur (7 per mille).

Excluding Jews, Sikhs and Parsis, whose total strength is in each case less than 1,000, the highest proportion of literacy is found amongst Christians, where it stands at 473 males and 335 females per mille, or 272 and 203, respectively, if native Christians alone be considered. The Jains have 455 literate males per mille, but the corresponding proportion for females is only 16. In this province, as in Berar and Madras, the Muhammadans, with 177 males and 9 females per mille, who are literate, take precedence of the Hindus, who have only 55 males and 1 female respectively. The Animists as usual occupy the lowest place with only 4 literate males per mille and practically no literate females.

Of the Hindu castes the most advanced are the Káyasths, Baniyas, Bráhmans and Bidurs, in the order named, with from 57 to 33 per cent. of their males literate; these four castes contain between them only 6 per cent. of the total number of Hindu males, but they claim 44 per cent. of those who are able to read and write. Amongst other castes with a fair sprinkling of educated men are the Sonar, Maráthá, Joshi, Bairági, Bhát, Bárai, Rájput, Darji, Gosain, and Kalar. The lower castes and forest tribes have hitherto enjoyed but few opportunities for education and the number of literate males is in nearly all cases less than 1 per cent. The Káyasths alone have a fair proportion of literate females, *viz.*, 26 per mille, compared with 11 and 9 in the case of Baniyas and Bráhmans respectively.

Only 4 males per mille and less than 1 female are able to read and write English. About three-fifths of the total literate population returned Hindi as the language which they could read and write; one-fifth named Maráthi, one-tenth Oriya and one-twentieth Urdu.

The number of literate persons aged 15 and over has increased considerably since 1891 in spite of the high standard of literacy which was taken for census purposes.* The number of pupils on the rolls of the Education Department rose from 111,498 in 1891 to 154,101 in 1896, when further progress was checked, first by the inclusion of the provincial grant for primary education in the general contributions to District Council Funds, and subsequently by a large reduction in these contributions. The District Councils were thus unable to support all the schools and the number of pupils in 1900 was only 127,600.

Madras

291 Excluding the small provinces of Coorg and Ajmer-Merwara, Madras ranks next to Burma, and the proportion per mille who are literate is 119 in the case of males and 9 in that of females.† In the City of Madras 1 male in 3 and 1 female in 11 can read and write; elsewhere the most

Locality	PROPORTION OF LITERATE PER MILE	
	Male	Female
West Coast Division	155	25
South "	113	"
East "	83	6
Decan "	81	4
Agency "	18	1

advanced tract is the West Coast Division which includes the Nilgiris, Malabar and South Canara. In respect of males it is followed closely by the South Division, but its literate females are relatively almost three times as numerous as those of the latter tract. The remote and sparsely populated Agency division is naturally the most backward. Of the main religious communities, the Christians lead the way with 198 males and 91 females per mille, or 162 and 59

Ante, paragraph 286.

Excluding Cochin and Travancore which are dealt with separately in paragraph 297.

respectively, if Europeans and Eurasians are excluded. They are followed by the Muhammadans with 140 and 9 and the Hindus with 116 and 7. The Animists, as usual, are almost wholly illiterate. The relatively large number of literate Muhammadans is due in part to the special efforts made by Government in recent years to moderate the fanaticism of the Mappilas by giving them special educational advantages. The low position of the Hindus as a body is explained by the dead weight of the lower castes, who do not readily take to learning. The superior castes contain a much larger proportion of persons able to read and write than the Muhammadans, and far surpass them in the matter of higher education.

292 The statistics of literacy by caste show that next to the Eurasians, who are almost all literate, the Bráhmans stand first with 578 males and 44 females per mille. The proportions for this caste vary in different parts of the Presidency. The Tamils have most literate males (736 per mille) and the Malayálam Brahmins most literate females (212 per mille); the wider diffusion of female education amongst the latter gives them the first place for the two sexes taken together. Those who speak Oriya are the most backward section of the caste and take rank below the Komatis, Náyers and Chettis. The Native Christians, who are recruited for the most part from the lowest servile castes, rank next, and then various groups of artizans, toddy-drawers and oil-pressers. Certain castes of cultivators and shepherds, though of higher social rank than those just referred to, are outstripped by them in the matter of education. Last of all come the earth-diggers, leather-workers, agricultural serfs and various hill and forest tribes. Mr. Francis draws attention to the superiority in education of the Malayálam to the corresponding Tamil castes, and of the Tamils to the corresponding Telugus. At the same time Tamil is the language best known to 56 per cent. of those who can read and write, Telugu to only a quarter and Malayálam to only one-ninth.

Only 90 males and 10 females in every 10,000 of each sex are able to read and write English*. In this respect the Hindus slightly excel the Muhammadans. Amongst Bráhmans the language is known to 975 in every 10,000 males but to only 11 females in the same number. So far as the latter sex is concerned the Native Christians with 77 in 10,000 show the best results, the corresponding proportion for males is 272. The figures for the English-knowing are much smaller than one would have expected from the extent to which this language enters into the general school curriculum, and from the fact that it is taught even in primary schools in the larger towns, as well as from the increasing degree to which it is spoken by the lower classes, especially by domestic servants, and it would seem that the standard taken by the enumerators must have been too high to permit of their inclusion. Many of those who can speak English are not able to read or write it.

293 In comparison with 1891 the results of the present census are very disappointing and only 74 males and 11 females per 1,000 of each sex are literate at the age of 10 and over, as against 188 and 9 respectively ten years earlier. It seems scarcely credible that there can have been a retrogression to this extent. The returns of the Education Department show that the

Year	Number of pupils in all schools
1881	327,808
1891	614,164
1901	850,224

number of persons under instruction has increased very greatly during the last two decades and unless the rise is due mainly to some change of system, *i. e.*, to the inclusion in the returns of schools previously left out of account a considerable growth of the literate population must have taken place. Mr. Francis is of opinion that the standard of literacy was higher at the

present census than in 1891. He says:—

“Mr. Stuart thought that in 1891 the number of literate males above the age of 25 was exaggerated by the inclusion therein of people who could only sign their names, and consequently at all the classes of oral instruction of Tahsildars and others held in the districts. I emphasised the necessity of precautions against the repetition of this error. At these classes I was almost always asked to define the term ‘literate,’ and the answer always given was that no person should be considered to be literate who could not write a letter to a friend and read the reply received from him. It is thus probable that the standard of literacy required at the present census was higher than that demanded at former enumerations.”

* Cochin and Travancore are again left out of account

However this may be, the decline in the case of males is common to all districts except the Nilgiris.

Punjab and
North-West
Frontier
Province

294 Including the Feudatory States there are, according to the census, 976,663 persons in the Punjab who are able to read and write. This gives a proportion of 36 per mille for the total population, or of 64 males and 3 females for each sex taken separately. The proportion of literate males is 68 per mille in British districts compared with 48 in the Native States, but in other respects the local variations in the prevalence of education are far less marked in the Punjab than in most provinces, and in natural divisions the proportion ranges between 60 per mille in the western part of the Gangetic plain and 70 in the "North-West Dry Area". Of individual districts the most advanced are Multan,* where 1 male in every 10 can read and write, and Jhang, Dehra Ismail Khan and Rawalpindi where 1 in 11 can do so. In Hazara and Kurram, on the other hand, only 1 male in 30 is literate. The total number of literate females is so small that the proportions are much influenced by the inclusion of Europeans, and the districts which head the list are those where Europeans are numerous such as Peshawar, Rawalpindi, Simla and Lahore.

Religion	LITERATE PER 1,000	
	Males	Females
Parsi	786	482
Christian	572	311
Jain	480	18
Buddhist	164	10
Sikh	93	7
Hindu	103	4
Muhammadan	26	1

The Parsis and Christians claim as literate three-fifths and one-half respectively of their total strength. The proportions for the other religions are — Jains 1 in 4, Buddhists 1 in 12, Hindus 1 in 17, Sikhs 1 in 19 and Muhammadans 1 in 68. Of the 42,432 literate females nearly one-fifth are Christians. The proportions for all other religions are very small, their relative position is the same as in the case of males, the Jains coming first and the Muhammadans last of all. The optional table showing education by caste was not prepared in the Punjab.

There are 98,831 persons literate in English of whom one-third are Christians. Excluding this religion there are only 66,506 males and 760 females who know English. The proportion per 10,000 males is — for Hindus 72, for Sikhs 49 and for Muhammadans 25. Of the total number of persons returned as literate 38 per cent. can read and write Urdu, 25 per cent. Urdu or Mahājani, 17 per cent. Gurmukhi and 15 per cent. Hindi.

The total number of literate persons at the age of 15 and upwards is 868,743, viz., 835,642 males and 33,101 females compared with 789,911 males and 18,798 females in 1891. The absolute number shows an increase for both sexes, but in the case of males the gain is not commensurate with the general growth of the population and the proportion per mille is smaller now than it was ten years ago. Mr. Rose thinks that the enumerators were inclined to omit from the record literacy in scripts like Tankri and Lande which are not taught in the Government schools, but the error on this score was probably not greater on the present occasion than in 1891.

United
Provinces

295 The returns for the United Provinces place the number of literate persons at 1,435,844 males and 56,413 females. The proportion per mille is 57 for males and 2 for females. So far as can be gathered from the statistics collected at the census, the Western Himalayan districts, with a literate population of 105 males and 5 females per mille, are the best educated part of the province. The proportions are almost identical in the Central India Plateau, Mirzapur and the Eastern part of the Gangetic plain, where literate persons are less numerous by one-third than in the area first mentioned. Then follow the central part of the Gangetic plain, the Sub-Himalaya East, the Western plain and, last of all, the Sub-Himalaya West, or the line of districts between Sahāranpur and Pilibhit. Dehra Dūn with its large population of Europeans and Eurasians is the only district where the number of educated females (20 per mille) is at all appreciable, Lucknow and Benares have 8 and Allahabad and Bareilly 6, but in no other district does the proportion exceed 5 per mille, while in Fatehpur, Hamirpur and Gonda it is less than 1. The above distribution of the literate is almost the reverse of that indicated by the statistics of the Education Department, a circumstance which Mr. Burn explains by the suggestion that private education is most common in the districts where the census proportions are highest.

* Excluding Malakand, Dir, Swat and Chitral.

The greatest prevalence of literacy (481 males and 318 females per mille) is found amongst Christians. Separate figures are not available for Native Christians, but Mr. Burn mentions that the mission which has obtained the largest number of converts has recently been compelled by want of funds to close many of its schools. The Jains come next, with two-fifths of their male population able to read and write, but in respect of their females they are surpassed by the small community of Aryas who, with very nearly the same proportion for males, have 1 literate female in every 15, compared with only 1 in 59 amongst the Jains. The Hindus have only 30 literate persons per mille and the Muhammadans 28; the sex proportions for the former are 56 males per mille and 2 females, and for the latter 52 and 3.

The United Provinces are as backward in respect of a knowledge of English as they are in education generally, and only 35 males and 5 females per 10,000 claim to be able to read and write this language. Excluding Christians the proportions are only 26 and 0·2. It is noteworthy that 37 Musalman males in every 10,000 know English compared with only 23 Hindus, whereas in Bengal the corresponding proportions are 114 for Hindus and only 28 for Muhammadans.

296 Only eight castes were dealt with in the table showing education by caste and the conclusions to be drawn from it are thus very limited. The most interesting fact disclosed is the high educational position of the Káyasths; they constitute barely 1 per cent of the total population, but they claim 11 per cent of the total number of persons who can read and write, and 20 per cent. of the aggregate of literate females.

Mr. Burn has compiled some very interesting information regarding the characters in use in the United Provinces. More than a million persons know only the Nagri character or some cursive form derived from it (Kaithi), as compared with about a quarter of a million who know the Persian character only and rather more than an eighth of a million who know both.

In spite of the fact that the number of pupils in primary schools has risen during the decade from 158,908 to 276,396, the present census shows a slight decline in the proportion of males who are literate at the age of 15 and upwards. The increased attendance at primary schools, and especially at those of the "Aided" class, dates mainly from 1896, when an additional grant of Rs 75,000 was made to District Boards for expenditure on the advancement of primary education, and when the census was taken there had scarcely been time for this to have affected the number of literate persons at the ages at which alone comparison with the results of the previous census is possible. But even so, it is difficult to believe that there has been a real falling off in the proportion of the literate amongst males. The proportion of literate females per mille has improved, but the absolute number is still very paltry.

297 It is not proposed to discuss in detail the statistics relating to Native States, and only a few points of special interest will be noticed.

From an educational standpoint the two States of Cochin and Travancore in the Madras Presidency are exceptionally advanced and take rank above all the British provinces except Burma. In Cochin 22 per cent of the male population can read and write and the proportion is almost as high in Travancore. In the former State 45 females per mille are literate and in the latter 31. Travancore has improved its position since 1891, but Cochin has retrograded, and the proportion of males aged 15 and over who are literate has fallen from 387 to 333 per mille. The high position of these two States is due in part to the fact that a quarter of their inhabitants are Christians, mainly of the Syrian Church, or its modern offshoots who are far better educated than the other sections of the community.

298 Baroda follows next with 163 males and 8 females per 1,000 of each sex. This represents a marked improvement, as compared with 1891, and is ascribed to measures taken in that year to increase the number of the village schools where the first rudiments of knowledge are taught. The expenditure on education in this State is far above the average and works out to 7 annas per head of the population.

299. The only other State with a fair relative prevalence of education is Mysore. Mysore, where there are 93 males and 8 females per mille who can read and write. If we exclude persons under 15 years of age, the proportions have risen

slightly since 1891, but this is due to immigration rather than to the greater activity of local educational institutions. Amongst immigrants the proportion of literate persons per mille is 157 for males and 21 for females compared with only 84 and 5 respectively amongst the native-born. The Christians and Jains are the best educated religious communities, and the Musalmans have relatively twice as many literate persons as the Hindus, though not so many as the higher Hindu castes such as Bráhmian, Komati, Nagārtha and Pille. Eighty per cent. of the literate population returned their mother-tongue as the language in which literate, the rest, chiefly immigrants of Tamil, Telugu or Maráthá origin, named other languages, which they had a better opportunity of learning in the local schools. A knowledge of English is found mainly in the cities of Mysore and Bangalore and in the Kolar Goldfields.

Central
India and
Rajputana

300 The proportional figures for 1891 shown against Central India and Rajputana refer only to the results obtained in certain towns where alone literacy was recorded in that year, and they are of no value for purposes of comparison. In Central India the Jains are almost wholly engaged in mercantile pursuits, and it is therefore not surprising to find that 36 per cent. of their males can read and write. The high proportion amongst the Muhammadans (14 per cent.) is accounted for by the circumstance that the followers of this religion are generally connected with certain dominant families. The Hindus who form the great bulk of the population are mainly agrarian and only 5 per cent. of their males are literate. The Mahesris are the best educated caste of Hindus; they are followed by the Bráhmans and Agarwáls. The Rájputs, who include in their ranks many of the ruling families, also take a high place. The Animists who number about a million can boast of only 946 persons able to read and write. Of the different Agencies, etc., the Indore Residency takes the highest place with a literate population of 177 males and 13 females per mille.

The general results in Rajputana are much the same as those in Central India, but while the standard of literacy amongst males is somewhat higher, there are fewer females who can read and write. In Rajputana, moreover, the Muhammadans rank below the Hindus, as they include in their ranks numerous converts from the lower sections of Hindus who are mostly agriculturists and amongst whom education has made little progress. The proportion of literate persons is highest in Sirohi (124 males and 6 females per mille) and lowest in Dholpur where only 26 males per 1,000 and 5 females per 10,000 can read and write.

Hyderabad

301 The proportional strength of the literate population in Hyderabad is almost identical with that in Central India. The statistics indicate a slight improvement in the number of educated females, but that of males has suffered a considerable diminution. The Jains, of whom more than 1 male in 3 can read and write, are as usual far better educated than the Hindus or Muhammadans. The ruling prince being a Muhammadan, it perhaps is only natural that his co-religionists, with 1 literate male in 10, should be far ahead of the Hindus, of whom only 1 male in 21 can read and write.

Kashmir

302. As already stated, Kashmir is, in educational matters, the most backward tract in the whole of India. The whole State contains only 74 schools with 5,423 pupils, an insignificant number compared with the total population of school-going age which approaches a million. The Muhammadans, who form three-quarters of the population, are by far the most ignorant, and only 7 per mille can read and write compared with 58 per mille in the case of Hindus.*

* In *The Valley of Kashmir*, Sir Walter Lawrence shows that in 1891, when there were only 1,585 boys on the rolls of the State schools, the Hindus though forming less than 7 per cent. of the population, monopolised over 83 per cent. of the education bestowed by the State. He adds that the more affluent of the villagers prefer the Mosque schools to the instruction given by the State and that many Muhammadans of the better class can read and write Persian with ease. In these circumstances one would have expected to see a somewhat higher proportion of literate Muhammadans than that indicated by the census figures.

SUBSIDIARY TABLE I.

Education by age, sex and religion.

Age Period	NUMBER PER 1,000						NUMBER PER 1,000 LITERATE IN—						NUMBER PER 10,000 LITERATE IN ENGLISH			FEMALES TO 1,000 MALES		
	LITERATE			ILLITERATE			PROVINCIAL VERNACULARS		OTHER LANGUAGES									
	Total	Male	Female	Total	Male	Female	Male	Female	Male	Female	Total	Male	Female	Literate	Illiterate	Literate in English		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
All religions.																		
All ages	53	98	7	917	102	993	95	6	1		38	68	7	68	1,061	102		
0-10	8	13	2	992	987	998	13	2			5	7	2	157	1,001	3.8		
10-15	51	85	10	949	915	990	82	9	2	1	38	62	9	99	892	124		
15-20	75	132	14	925	868	986	129	12	5	1	74	131	13	95	1,056	94		
20 and over	74	139	8	826	861	992	134	7	7	1	50	91	8	54	1,140	90		
Hindu																		
All ages	50	94	5	950	906	995	93	1	3		33	64	1	45	1,065	14		
0-10	8	14	2	992	986	998	14	1			3	5		102	1,006	35		
10-15	49	83	7	951	917	993	82	7	1		36	64	1	69	896	18		
15-20	71	127	10	929	873	990	126	10	3		71	133	2	69	1,028	16		
20 and over	68	131	5	932	869	995	128	5	5		41	81	1	39	1,117	12		
Sikh.																		
All ages	59	98	7	941	902	993	106	7	4		30	52		58	812	6		
0-10	5	7	2	995	993	998	8	2			1	2		168	765			
10-15	44	67	10	956	933	990	71	10	1		26	43		103	704	3		
15-20	67	103	14	933	897	986	115	14	3		79	131	1	89	731	7		
20 and over	83	143	8	917	857	992	156	8	7		34	61		47	936	6		
Jain.																		
All ages	252	470	18	748	530	982	433	17	29	1	70	134	1	25	1,721	9		
0-10	17	87	7	953	913	993	85	7	2		4	8		82	1,077	25		
10-15	252	442	30	718	558	970	431	29	16	1	82	150	2	58	1,486	13		
15-20	329	567	29	671	413	971	588	28	34	1	165	304	3	42	2,023	8		
20 and over	317	596	18	683	404	982	572	17	41	1	76	146	1	28	2,272	4		
Buddhist.																		
All ages	220	402	12	780	598	958	398	42	4		12	24	1	108	1,640	13		
0-10	22	33	11	978	967	989	33	11			2	3		316	1,043	136		
10-15	197	327	58	808	673	942	325	57	2		13	24	1	165	1,312	59		
15-20	283	519	72	717	481	928	514	72	5		24	50		156	2,163	42		
20 and over	316	590	50	684	410	950	585	50	6		15	30	1	87	2,388	34		
Zoroastrian																		
All ages	649	756	538	351	244	482	690	505	67	30	2,555	4,075	961	679	1,807	225		
0-10	211	220	201	789	780	799	201	187	16	12	222	268	177	922	1,036	668		
10-15	781	840	715	219	160	285	783	656	41	38	2,078	2,780	1,312	779	1,632	132		
15-20	880	909	789	150	91	211	886	750	84	37	3,904	5,546	2,183	828	2,289	375		
20 and over	742	895	581	258	105	419	813	548	87	34	3,235	5,381	958	612	3,761	168		
Musalman.																		
All ages	33	60	3	967	940	997	54	2	7	1	17	32		47	995	16		
0-10	4	7	1	998	993	999	7	1	1		1	2		115	982	31		
10-15	31	51	4	969	949	996	47	3	5	1	16	28		64	833	14		
15-20	45	84	5	955	916	995	76	4	9	2	39	75	1	64	1,054	17		
20 and over	48	89	4	952	911	996	80	3	11	1	22	43	1	39	1,035	16		
Christian.																		
All ages	211	291	125	789	760	870	193	74	40	21	963	1,289	615	103	1,154	447		
0-10	49	53	44	951	947	956	32	24	9	8	231	243	219	856	1,033	920		
10-15	213	245	177	787	755	823	194	126	20	18	734	786	676	656	989	780		
15-20	240	361	217	710	639	783	254	145	33	28	1,161	1,369	964	587	1,200	682		
20 and over	287	414	144	713	586	856	261	77	62	28	1,390	1,939	773	309	1,360	355		
Animist.																		
All ages	4	8		996	992	1,000	5		2		1	2		59	1,023	53		
0-10	1	1		999	999	1,000	1							160	1,027	71		
10-15	4	7	1	996	993	999	5		2		1	1		66	890	112		
15-20	6	11	1	994	989	999	8	1	2		2	4		72	1,057	55		
20 and over	6	11	1	994	989	999	8		4		2	3		50	1,051	42		

SUBSIDIARY TABLE II

Education by age, sex and locality.

PROVINCE, STATE OR AGENCY	LITERATE PER 1,000									
	0-10		10-15		15-20		20 and over		All ages	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	2	3	4	5	6	7	8	9	10	11
INDIA.	13	2	85	10	132	14	139	8	98	7
Provinces.	14	2	89	10	138	14	145	8	102	7
Ajmer-Merwara	20	4	94	10	119	12	157	9	120	8
Assam	13	2	65	7	92	8	94	5	67	4
Bengal	19	2	101	8	140	9	147	6	104	5
Bengal Proper	25	3	133	12	177	13	177	9	128	8
Bihar	10	1	61	3	93	4	102	3	70	2
Orissa	18	1	105	5	139	6	175	4	120	4
Chota-Nagpur	8	1	11	4	65	5	76	3	49	3
Berar	13	2	81	6	129	6	109	3	85	3
Bombay	21	3	117	15	168	19	163	9	116	9
Burma	33	12	315	61	485	77	537	53	378	15
Central Provinces	5	1	49	4	81	4	76	2	54	2
Coorg	8	3	92	23	162	37	173	16	128	16
Madras	11	2	95	15	166	22	175	10	119	9
N W Frontier and Punjab	1	1	46	5	82	6	96	4	64	3
United Provinces of Agra and Oudh	6	1	15	3	76	4	81	3	57	2
States and Agencies.	11	2	62	9	104	12	108	7	79	6
Baroda State	34	4	160	13	206	13	208	7	163	8
Central India Agency	10	1	49	4	75	8	72	1	55	3
Cochin State	17	7	168	59	282	77	343	56	224	15
Hyderabad State	9	2	45	5	77	6	75	4	55	3
Kashmir State	2	..	22	1	45	1	60	1	38	1
Mysore State	14	3	82	11	141	18	128	8	93	8
Rajputana Agency	11	..	63	2	77	3	83	2	62	2
Travancore State	17	7	136	43	264	54	319	35	215	31

SUBSIDIARY TABLE

Education by religion, sex and locality.

PROVINCE, STATE OR AGENCY	LITERATE PER 1,000									
	HINDU		JAIN		MUSALMAN.		CHRISTIAN		AHMADIST	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	2	3	4	5	6	7	8	9	10	11
INDIA.	91	5	470	18	60	3	291	125	8	...
Provinces.	99	5	477	24	60	3	297	152	9	1
Ajmer Merwara	95	5	557	11	96	4	644	506	..	..
Assam	90	4	..	..	41	2	325	217	9	1
Bengal	127	6	73	83	68	2	310	191	8	..
Berar	83	2	462	9	111	8	600	518	2	..
Bombay	110	5	490	27	73	5	380	203	11	..
Burma	207	42	..	..	191	33	423	243	48	2
Central Provinces	55	1	455	16	177	9	473	335	4	..
Coorg	121	13	..	..	169	13	352	169	1	..
Madras	116	7	415	16	140	9	198	91	5	..
N W Frontier and Punjab	103	4	180	18	28	1	572	311	..	..
United Provinces of Agra and Oudh	56	2	397	17	52	3	481	318	..	..
States and Agencies.	72	5	456	9	67	6	281	75	3	..
Baroda State	160	5	687	19	178	6	135	47	7	..
Central India Agency	50	3	361	8	138	16	709	415	2	..
Cochin State	218	39	500	..	125	6	272	73	1	..
Hyderabad State	48	2	312	6	97	10	551	307	2	..
Kashmir State	107	2	602	..	13	..	521	392	..	..
Mysore State	86	5	424	24	164	25	391	238	5	1
Rajputana Agency	50	1	164	8	44	3	709	719	2	..
Travancore State	208	25	..	..	158	11	259	53	3	1

SUBSIDIARY TABLE IV

English Education by age, sex and locality.

PROVINCE, STATE OR AGENCY	LITERATE IN ENGLISH PER 10 000 in 1901										LITERATE IN ENGLISH PER 10 000 IN 1901	
	0-10		10-15		15-20		20 and over		All ages		All ages	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13
INDIA.	7	2	62	9	131	13	91	8	68	7	36	5
Provinces.	7	3	68	10	143	14	98	9	74	7	37	4
Ajmer-Merwara	53	11	114	23	259	28	186	15	165	29	87	13
Assam	6	1	66	4	117	6	89	6	61	5	35	2
Bengal	12	2	107	8	180	9	114	7	89	6	43	3
Bengal Proper	18	3	173	13	280	14	173	12	138	9	67	5
Bihar	4	1	34	2	65	3	42	2	33	2	16	1
Orissa	4	1	29	2	53	2	36	2	28	1	17	1
Chota-Nagpur	4	1	24	2	45	2	42	2	27	1	12	1
Behar	3	1	44	5	126	6	71	4	56	4	17	2
Bombay	8	5	79	19	217	32	154	17	112	15	60	8
Burma	10	6	49	18	89	21	83	14	61	13	40	9
Central Provinces	3	2	16	5	62	8	56	5	37	1	18	2
Coorg	11	7	83	21	211	26	189	31	131	24	75	13
Madras	7	2	80	15	190	25	121	12	90	10	14	6
N.-W F and Punjab	3	2	43	7	119	9	88	7	63	6	30	4
United Provinces of Agra and Oudh	14	2	25	5	57	7	56	5	35	5	18	3
States and Agencies.	4	2	27	7	66	10	50	6	37	5	28	5
Baroda State	2		37	2	115	3	67	2	53	2	18	1
Central India Agency	4	1	21	4	56	5	44	4	33	3	645	137
Cochin State	5	1	114	27	256	36	135	10	108	12		
Hyderabad State	3	3	16	6	31	8	30	5	21	4	11	3
Kashmir State			8		23		13	1	9			
Mysore State	8	4	64	18	172	34	113	19	83	16	51	11
Rajputana Agency	4	1	13	1	22	2	25	2	19	1		
Travancore State	4	2	60	20	176	27	119	14	87	13		

NOTE.—The proportions knowing English in 1901 are based on the figures for the persons returned as 'literate' statistics of the English knowing were not collected for the persons then returned as 'learning'. The figures against Madras in columns 12 and 13 include Cochin and Travancore and those for Central India refer only to the persons enumerated in a few towns and on the railway.

SUBSIDIARY TABLE V.

Progress of education since 1881 by locality.

PROVINCE, STATE OR AGENCY	NUMBER PER 1 000 MALES						NUMBER PER 1 000 FEMALES						NUMBER PER 1 000 OVER 15 YEARS OF AGE WHO ARE LITERATE			
	1901		1891		1881		1901		1891		1881		MALES		FEMALES	
	Literate	Learning	Literate	Learning	Literate	Learning	Literate	Learning	Literate	Learning	Literate	Learning	1901	1891	1901	1891
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
INDIA.	98	87	22	66	25	7	4	2	3	1	138	141	8	6		
Provinces.	102	86	22	66	25	7	4	2	3	1	144	141	9	6		
Ajmer-Merwara	120	111	21	99	23	8	6	2	5	1	151	176	9	9		
Assam	67	58	18	33	14	4	2	1	1		91	100	6	3		
Bengal	104	81	24	56	29	5	3	1	2	1	116	137	7	1		
Behar	85	58	26	42	20	3	1	1	1		111	94	3	2		
Bombay	116	94	32	78	29	9	5	2	3	2	155	155	19	7		
Burma	378	391	59	352	109	45	24	5	18	18	529	603	56	31		
Central Provinces	54	38	14	32	15	2	1	1	1		77	66	2	2		
Coorg	128	112	44	88	43	16	9	4	5	5	171	169	20	13		
Madras	119	116	33	103	35	9	7	3	6	3	171	188	11	9		
N.-W F and Punjab	64	59	13	47	14	3	2	1	1	1	93	97	4	3		
United Provinces of Agra and Oudh	57	51	10	45	13	2	2		1		80	83	3	2		
States and Agencies.	79	91	22	64	19	6	7	2	1	1	107	143	8	10		
Baroda State	163	109	31	87	19	8	1	2	1	1	207	175	8	6		
Central India Agency	55	242	36	238	63	3	27	6	36	17	72	329	4	37		
Cochin State	224	238	66			45	38	17			333	387	59	58		
Hyderabad State	55	59	13	50	13	3	2	1	1		75	92	4	3		
Mysore State	93	81	24	81	31	8	5	3	2	2	131	127	9	7		
Rajputana Agency	62	206	42	...		2	86	23			82	340	2	123		
Travancore State	215	191	10			31	27	8			311	286	38	37		

NOTE.—In columns 13 and 15 persons shown as learning in 1891 have been treated as literate. The figures against the Central India Agency for 1891 refer not to the whole area but only to the inhabitants of certain towns. Similarly the 1891 figures for Rajputana are based on the return for (1) Railway, (2) Europeans and Eurasians and (3) Cantonment population, the total number of persons dealt with was only 16 716.

SUBSIDIARY TABLE VI.

Education by Selected Castes.

Castes	NUMBER PER 1,000						NUMBER PER 10,000 LITERATE IN ENGLISH			PERCENTAGE OF PROPORTION OF LITERATE OR CORRESPONDING PROPORTION FOR THE WHOLE PROVINCE		
	Literate			Illiterate								
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13
ASSAM.												
Brahman	297	517	27	703	483	973	330	592	8	825	772	675
Kayastha	274	471	56	721	529	944	493	910	9	775	703	1 400
Kalita	50	93	2	950	907	998	43	81	1	139	139	50
Das	48	90	3	952	910	997	20	39		133	134	75
Ahom	31	59	2	969	941	998	50	97	1	86	88	50
Rajbansi	30	58	1	970	942	999	12	23		83	87	23
Kaibartta and Kowat	26	50	1	974	950	999	18	35		72	75	25
Chutia	24	46	...	976	954	1,000	24	47		67	69	
Koch	24	46	1	976	954	999	16	31	...	67	69	25
Nadial (Dom-Patni)	20	37	2	980	963	998	5	10		56	55	50
BENGAL.												
Baidya	456	648	259	544	352	741	1,585	3,039	85	829	623	5,180
Kayastha	311	560	66	689	440	934	673	1,323	33	567	538	1,320
Brahman	238	467	26	762	533	974	358	737	5	433	449	520
Sadgop	139	268	12	861	732	988	165	328	2	252	258	210
Kuabartta (Chasi)	130	323	4	870	677	996	52	131		236	311	80
Pod	94	183	5	906	817	995	15	29	...	170	175	100
Babhan	88	166	9	912	834	991	13	27		160	160	180
Teli	60	118	3	940	882	997	26	53		109	113	40
Chandal or Namasudra	33	64	1	967	936	999	4	9	...	60	62	20
Rajbansi	31	59	1	969	941	999	3	6		56	56	20
Jolaha	25	50	2	975	950	998	10	20	...	45	48	40
Santal	3	7	..	997	993	1,000		1	...	5	7	
BERAR.												
Brahman (Akola)	366	595	47	334	105	953	620	1,054	15	813	700	1,567
Wani (")	309	530	8	691	470	992	38	66	..	687	624	267
Pathan (")	56	104	7	944	896	993	45	88	2	124	122	233
Shukh (")	52	97	7	948	903	993	34	66	1	116	114	233
Teli (Amraoti)	33	64	1	967	936	999	6	12		73	75	33
Kunbi (Akola)	33	64	2	967	936	998	5	9	...	73	75	67
Mali (Amraoti)	22	42		978	958	1,000	5	9	..	49	49	...
Mahar (")	5	9		995	991	1,000	2	4	...	11	11	

SUBSIDIARY TABLE VI—*contd.*Education by Selected Castes—*contd.*

CASTES	NUMBER PER 1,000						NUMBER PER 10,000 LITERATE IN ENGLISH			PERCENTAGE OF PROPORTION OF LITERATE OR (CORRESPONDING PROPORTION FOR THE WHOLE PROVINCE)		
	Literate.			Illiterate.								
	Total	Male	Female.	Total.	Male	Female.	Total	Male	Female	Total	Male	Female
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
BOMBAY.												
Vani (Gujarat) . . .	444	776	168	556	224	842	331	709	5	694	669	1,755
Prabhu	328	474	177	672	526	823	1,566	2,914	172	612	409	1,967
Brahman	323	580	54	677	420	946	529	1,026	10	605	500	600
Native Christian . . .	286	373	110	714	627	890	2,472	2,846	1,713	447	322	1,222
Bhatia (Sind)	182	321	35	818	679	965	190	368	2	284	277	389
Musalman	24	44	2	976	956	998	8	15	.	37	38	22
Maratha (Deccan) . . .	19	43	1	981	957	999	4	8	..	30	37	11
„ (Bombay Proper) . .	23	59	1	922	941	999	5	10	...	22	51	11
„ Kunbi	11	26	..	989	974	1,000	3	7	.	9	22	
Koli	13	24	1	987	976	999	...	.	..	20	21	11
Dhed or Mahar	4	7	...	996	993	1,000	1	2	.	6	6	
BURMA.												
Burmese	268	490	55	732	510	945	11	20	2	125	130	122
Talaing	211	357	62	789	643	938	11	19	3	98	94	138
Karen	91	143	37	909	857	963	23	33	12	42	38	82
Shan	79	152	9	921	848	991	1	2	...	37	40	20
Chin	25	48	2	975	952	993	1	1	..	12	13	4
Kachin	8	14	2	992	986	998	...			4	4	4
CENTRAL PROVINCES.												
Bania	232	446	11	768	554	989	49	95	1	829	826	550
Brahman	194	365	9	806	635	991	176	337	2	693	676	450
Sonar	109	215	4	891	785	996	21	42	.	389	398	200
Maratha	100	200	3	900	800	997	89	180	1	357	370	150
Bairagi	85	160	4	915	840	996	2	4	...	304	296	200
Kalar	52	105	1	948	895	999	10	19	...	186	194	500
Gond	3	6	...	997	991	1,000	..	.	...	11	11	
Chamar	2	4	...	998	996	1,000	...	...		7	7	..
MADRAS.												
Eurasian	719	729	710	281	271	280	7,045	7,150	6,951	1,141	613	7,859
Brahman	308	578	44	692	422	956	488	975	11	489	486	489
Native Christian . . .	109	162	50	891	838	941	173	272	77	173	136	656
Kammala	104	207	3	896	793	997	5	11		165	174	33
Shanai	79	154	6	921	846	994	3	5		125	129	67
Meppilla	45	87	4	955	913	996	3	5	1	71	73	44
Paraiyan	5	10	..	995	990	1,000	...	.	.	8	8	
Mala	3	6	...	997	994	1,000	..	1	...	5	5	...
Madiga	1	2	...	999	998	1,000	...	...	...	2	2	...
Cheruman	1	2	..	999	998	1,000	...	...	...	2	2	

SUBSIDIARY TABLE VI—*contd.*Education by Selected Castes—*contd.*

CASTES	NUMBER PER 1,000.						NUMBER PER 10,000 LITERATE IN ENGLISH.			PERCENTAGE OF PROPORTION OF LITERATE ON CORRESPONDING PROPORTION FOR THE WHOLE PROVINCE		
	Literate			Illiterate			Total.	Male.	Female	Total.	Male	Female
	Total	Male.	Female.	Total.	Male	Female						
1	2	3	4	5	6	7.	8.	9.	10.	11.	12	13
UNITED PROVINCES OF AGRA AND OUDH.												
Kayastha . . .	810	553	46	690	447	954	...	...	...	1,000	970	2,300
Bairhi	9	17	1	991	983	999	...	...	...	29	30	50
Lohar	9	17	1	991	983	999	...	...	...	29	30	50
Chamar	1	2	...	999	998	1,000	...	...	...	3	4	..
BARODA STATE.												
Chandraseni (Kayastha Pralhu) . . .	437	744	88	563	256	912	921	1,671	68	497	456	1,100
Brahman (Maharashtra) .	424	730	56	576	270	944	555	1,018	...	482	448	700
Vania	337	681	18	663	369	982	177	338	2	383	387	925
Brahman (Gujarati) .	228	429	17	772	571	983	78	150	3	259	263	212
Maratha	184	339	8	816	661	992	117	219	2	209	208	100
Leva Kunbi	178	316	14	822	684	986	30	56	...	202	194	175
Khatni (Vanza) . . .	188	275	1	862	725	999	11	23	...	157	169	12
Rajput	77	147	1	923	853	999	13	25	..	87	90	12
(Kunbi) Kadava . . .	41	80	..	959	920	1,000	4	8	...	47	49	..
Dhed	6	12		994	988	1,000	...	.	...	7	7	
CENTRAL INDIA AGENCY.												
Maratha	120	231	10	880	769	990	117	222	12	400	420	333
Brahman	97	183	3	903	817	997	13	26	...	323	323	100
Dhangai	64	110	5	936	890	995	50	86	4	213	200	167
Josh	61	115	1	939	885	999	2	4	...	203	209	33
Gujar	8	14	.	992	986	1,000	1	2	...	27	25	...
COCHIN STATE.												
Brahman (Malayali) .	472	695	227	528	305	773	34	66	...	352	310	501
Kshatriya (Malayali) .	466	615	319	534	385	681	617	1,171	67	318	276	709
Nayar	266	425	119	734	575	681	108	209	14	199	190	264
Native Christian . .	172	270	72	828	730	928	59	96	21	128	121	160
Kaimala	102	202	6	898	798	994	2	3	..	76	90	13
Thwan	66	126	7	934	874	993	4	9	..	49	56	16
Mappilla (Jonakan) .	62	118	5	938	882	995	2	4	...	46	53	11
Kudumi Cheppi . . .	23	41	1	977	959	999	3	5	...	17	18	2
Pulayan	4	8	...	996	992	1,000	...		...	3	4	...

SUBSIDIARY TABLE VI—*concl'd.*Education by Selected Castes—*concl'd.*

CASTES	NUMBER PER 1,000						NUMBER PER 10,000 LITERATE IN ENGLISH			PERCENTAGE OF PROPORTION OF LITERATE ON CORRESPONDING PROPORTION FOR THE WHOLE PROVINCE		
	Literate.			Illiterate.			Total	Male	Female	Total	Male	Female
	Total	Male	Female	Total	Male	Female						
1.	2	3	4	5	6	7	8	9	10	11	12	13
MYSORE STATE.												
Brahman	376	681	64	624	319	986	528	1,022	24	737	732	800
Digambara	226	410	21	774	590	979	43	79	.	443	441	262
Panchala	98	177	4	907	823	996	9	17	...	182	190	50
Lungayat	73	142	4	927	858	996	7	13	.	143	153	50
Vakkhaliga	21	41	1	979	959	999	4	7	.	22	44	12
Kuruba	11	21	1	989	979	999	1	3	.	22	41	12
Korama	10	17	2	990	983	998	.	.	.	20	18	25
Beda	10	18	1	990	982	999	2	4	.	20	19	12
Meda	8	16	...	992	984	1,000	...	..	.	16	17	.
Holaya	5	9	1	995	991	999	3	6	...	10	10	12
Lambani	1	1	1	999	999	999	...	...	.	2	1	12
TRAVANCORE STATE.												
Brahman (Malayali)	446	663	191	554	337	809	23	41	2	360	308	616
Ambalavasi	371	576	156	629	424	844	106	208	...	299	268	503
Kanian	295	519	55	705	481	945	...	2	.	238	241	177
Nayar	216	376	57	784	624	943	59	111	6	174	175	184
Native Christian . .	156	257	51	844	743	949	80	129	28	126	120	165
Kammala	124	238	11	876	767	986	3	6	.	100	108	45
Iluvan	73	137	10	927	863	990	4	7	.	59	61	32
Shanan	37	70	4	963	930	996	2	4	.	30	33	13

SUBSIDIARY TABLE VII.

Main results of University Examinations in 1891 and 1901.

Universities.		MATRICULATION OR ENTRANCE.		F A OR INTERMEDIATE EXAMINATION, 1st B.A., 1st B.Sc.		DEGREES		LAW		MEDICINE		CIVIL ENGINEERING	
		Candidates	Passed	Candidates	Passed	Candidates	Passed	Candidates	Passed	Candidates	Passed	Candidates	Passed
1.		2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
Calcutta	1901	5,814	3,131	3,510	1,125	1,932	415	578	166	506	208	62	19
	1891	4,721	2,035	1,996	737	970	304	210	132	108	70	24	9
Madras	1901	7,313	1,423	3,614	1,761	801	413	610	300	97	49	30	19
	1891	7,002	1,648	2,600	1,027	508	263	130	40	94	22	10	1
Bombay	1901	4,551	1,611	1,396	809	359	225	498	190	368	174	130	88
	1891	3,804	1,090	1,050	435	224	107	85	39	178	84	108	56
Allahabad	1901	1,860	810	526	197	315	190	59	8	...	..	564	351
	1891	1,593	606	476	204	180	103	28	13	...	..	323	155
Lahore	1901	2,315	1,312	527	244	376	138	387	181	116	62	...	...
	1891	1,066	399	153	87	66	44	...	...	40	23	...	...

Bombay—columns 2-3—Include for 1901 and 1891 respectively 983 examinees and 392 passed and 820 candidates and 331 passed in University School Final Examination.
 Punjab—columns 4-5—Include for 1901 5 candidates and 4 passed in Oriental learning
 .. columns 6-7—Include for 1901 and 1891 respectively 7 examinees and 4 passed and 5 examinees and 4 passed in Oriental learning

SUBSIDIARY TABLE VIII.

Number of institutions and pupils in 1891 and 1901, according to the returns of the Education Department.

CLASS OF INSTITUTION	Year	INDIA		ASSAM.		BENGAL.		BHRAR.		BOMBAY.	
		No. of Institutions.	Scholars.	No. of Institutions.	Scholars.	No. of Institutions.	Scholars.	No. of Institutions.	Scholars.	No. of Institutions.	Scholars.
1	2	3	4	5	6	7	8	9	10	11	12
All kinds	1901 1891	147,086 137,944	4,405,042 3,677,912	3,458 2,640	109,800 73,784	62,142 65,950	1,638,323 1,403,943	1,076 1,284	46,673 50,342	12,182 11,977	632,860 630,493
Public Institutions	1901 1891	101,743 99,700	3,799,880 3,194,974	3,198 2,855	104,308 73,995	52,066 52,563	1,520,137 1,336,896	1,081 1,275	46,252 50,203	9,617 9,324	569,183 553,092
Art Colleges	1901 1891	141 105	16,703 12,165	1 ...	49 ...	44 34	8,199 5,232	...	...	9 9	1,826 1,259
Professional Colleges	1901 1891	44 31	4,651 3,424	...	...	20 14	2,264 1,493	...	...	5 4	1,011 566
Secondary Schools	1901 1891	5,461 4,937	586,628 463,069	150 110	13,980 10,309	2,528 2,479	242,516 207,463	28 26	4,187 4,669	484 403	47,628 41,714
Primary Schools	1901 1891	98,133 94,023	3,157,724 2,690,827	3,006 2,222	80,050 62,145	48,881 49,755	1,251,972 1,115,662	909 1,247	41,915 45,423	9,067 8,564	514,022 506,672
Training Schools	1901 1891	170 346	5,496 5,734	22 18	380 331	27 223	1,232 1,933	1 1	57 91	19 15	821 881
Other Special Schools	1901 1891	794 223	28,428 14,065	17 7	849 210	566 68	13,034 5,043	3 1	91 25	33 29	2,925 1,970
Private Institutions	1901 1891	42,343 38,244	605,212 493,033	242 285	5,492 5,789	10,076 13,397	118,191 132,057	5 0	423 134	2,515 2,053	63,727 67,406
Advanced	1901 1891	4,891 5,430	61,761 66,727	89 96	2,431 1,853	2,875 3,800	25,264 32,090	2 6	65 99	83 84	2,857 1,233
Elementary	1901 1891	26,663 19,500	362,283 246,738	1 19	18 462	3,689 4,991	33,366 34,027	...	...	1,170 1,235	32,815 43,949
Teaching the Koran only	1901 1891	11,016 12,495	173,992 154,530	166 163	2,916 3,163	3,891 5,235	56,191 62,317	...	...	1,197 591	25,902 12,067
Other Schools not conforming to the departmental standard.	1901 1891	263 700	7,776 16,043	6 8	127 307	117 340	2,370 3,723	3 ...	358 ...	65 143	2,153 4,498

CLASS OF INSTITUTION.	Year	BURMA.		CENTRAL PROVINCES.		MADRAS.		PUNJAB.		UNITED PROVINCES.	
		No. of Institutions.	Scholars.	No. of Institutions.	Scholars.	No. of Institutions.	Scholars.	No. of Institutions.	Scholars.	No. of Institutions.	Scholars.
1	2	13.	14	15.	16	17	18.	19	20	21.	22
All kinds	1901 1891	17,599 10,863	307,076 163,449	2,394 1,845	127,416 111,493	26,926 22,028	850,224 644,164	7,479 9,640	289,164 245,713	13,920 11,717	433,409 269,521
Public Institutions	1901 1891	4,481 5,819	159,394 128,380	2,394 1,845	127,416 111,493	21,215 18,339	731,207 533,137	3,123 3,328	189,405 140,401	7,620 5,352	352,578 218,267
Art Colleges	1901 1891	2 1	140 25	3 8	262 212	41 35	3,279 3,205	13 7	1,251 463	28 16	1,697 1,734
Professional Colleges	1901 1891	...	...	2 ...	34 ...	6 5	686 518	1 1	178 124	10 7	728 723
Secondary Schools	1901 1891	829 83	80,000 9,004	958 260	9,934 24,112	732 815	100,126 70,516	406 283	68,067 46,424	546 503	70,270 53,254
Primary Schools	1901 1891	4,001 5,710	127,638 113,057	2,120 1,657	116,784 86,419	20,803 17,835	621,627 505,280	2,632 2,035	117,420 92,261	6,982 4,758	276,396 153,908
Training Schools	1901 1891	10 4	304 81	5 5	220 225	74 70	1,612 1,427	6 5	322 343	6 7	548 363
Other Special Schools	1901 1891	49 21	1,312 623	6 20	282 530	57 29	3,927 2,192	15 7	2,167 723	48 56	2,933 3,256
Private Institutions	1901 1891	13,118 5,044	147,682 40,069	...	...	5,711 3,159	119,017 61,037	4,356 7,312	69,759 105,312	6,300 6,365	60,921 71,254
Advanced	1901 1891	...	...	...	...	241 130	5,415 4,000	878 794	6,541 9,408	1,228 1,679	18,158 17,925
Elementary	1901 1891	12,839 4,321	142,965 37,014	...	...	4,460 2,343	84,467 53,109	1,023 1,476	22,670 31,433	3,486 3,542	45,932 41,711
Teaching the Koran only	1901 1891	251 213	4,078 2,993	...	...	1,005 187	29,073 4,464	2,916 4,302	39,081 57,397	1,586 1,244	16,751 11,619
Other Schools not conforming to the departmental standard	1901 1891	23 10	639 52	...	...	5 19	62 394	39 240	1,467 7,069	...	...

CHAPTER VI.

Occupation.

The Scope of the Return.

303. The subject of occupation is without doubt the most complicated, and in some respects, the least satisfactory of any dealt with at the census, but before discussing it in detail it is necessary to explain briefly the instructions which were issued with a view to obtaining the required information, and the plan adopted for its classification, i.e., the distribution of occupations according to a certain number of definite categories, under one or other of which every one of the innumerable entries found in the schedules should be classified. General

304. In 1891 the information on this subject was collected in a single column of the schedule headed "Occupation or means of subsistence," and the following instructions were laid down for the guidance of the enumerators:— The nature of the information collected

"Enter here the exact occupation or means of livelihood of all males and females who do work or live on private property, such as house-rent, pension, etc. In the case of children and women who do no work, enter the occupation of the head of their family, or of the person who supports them, adding the word "dependent," but do not leave this column unfilled for any one, even an infant. If a person have two or more occupations, enter only the chief one, except when a person owns or cultivates land in addition to another occupation, when both should be entered.

"No vague terms should be used, such as 'service,' 'Government service,' 'shop-keeping,' 'writing' and 'labour,' etc., but the exact service, the goods sold, the class of writing or of labour must be stated. When a person's occupation is connected with agriculture, it should be stated whether the land is cultivated in person or let to tenants; if he be an agricultural labourer, it should be stated whether he be engaged by the month or year, or is a daily field labourer. Women who earn money by occupations independent of their husbands, such as spinning, selling fire-wood, cow-dung cakes, grass, or by rice pounding, weaving, or doing house-work for wages should be shown under those occupations. If a person makes the articles he sells he should be entered as 'maker and seller' of them. If a person lives on alms, it should be stated whether he is a religious mendicant or an ordinary beggar. When a person is in Government, railway, or municipal service, the special service should be entered first, and the word Government, railway, or municipal, etc., after it, as:—clerk, Government; sweeper, municipal; labourer, railway. If a person be temporarily out of employ, enter the last or ordinary occupation."

At the present census three columns were provided, as noted in the margin,

OCCUPATION OR MEANS OF SUBSISTENCE OF ACTUAL WORKERS		Means of subsistence of dependents on actual workers
Principal	Subsidiary.	
9	10	11

two for the principal and subsidiary occupations, respectively, of actual workers, and the third for the means of subsistence of dependents, or persons supported by the labour of others. The instructions for filling in these three columns were as follows:—

"Column 9 (*Principal occupation of actual workers*).—Enter the principal occupation or means of livelihood of all persons who actually do work or carry on business, whether personally or by means of servants, or who live on private property such as house-rent, pension, etc. The column will be blank for dependents.

"Column 10 (*Subsidiary occupation of actual workers*).—Enter here any occupation which actual workers pursue in addition to their principal occupation. If they have no such additional occupation, enter in this column the word 'none.' The column will be blank for dependents.

"Column 11 (*Means of subsistence of dependents*).—For those who do not work or carry on business, either personally or by means of servants, and who own no private property, enter the principal occupation of the head of the family or of the person who supports them. The column will be blank for actual workers."

In the instructions to supervisors these rules were thus amplified:—

"In column 9 general or indefinite terms such as 'service,' 'shop-keeping,' 'writing,' 'labour,' etc., must be avoided. The enumerator should find out and state the exact kind of service, the goods sold, the class of writing or labour.

"If a man says his occupation is service, it is necessary to distinguish:—

(1) Government service, (2) Railway service, (3) Municipal service, and (4) village service; stating his rank and the nature of his work.

"In the case of domestic service the enumerator must state precisely the kind of service rendered. Pensioners should be shown as military or civil, as the case may be. Persons who

live on the rent of lands or buildings in towns should be entered as landlords. Persons who live on money lent at interest or on stock, bonds, or other securities, should be shown as capitalists.

"In the case of agriculture distinguish—(1) Rent receivers, (2) actual cultivators, including sharers, and (3) field labourers, separating those regularly employed from those who work by the day or by the job. Gardeners and growers of special products such as tea, betel, etc., should be entered separately. In the case of labourers, not being agricultural labourers, distinguish earth-workers, labourers in mines, and operatives in mills, etc., stating the kind of mill or factory, such as jute mills, silk factories, etc. In the case of clerks the occupation of the clerk's employer should be noted. Accountants, cashiers, salesmen in shops, etc., should be shown separately. In the case of traders the kind of trade should be carefully specified, and it should be stated whether they make what they deal in. In the case of large manufactures show the proprietor as a manufacturer, and specify the branch of manufacture, as cotton manufacturer, etc. For minor industries state precisely the nature of the work done, for example, whether a weaver weaves cotton, silk, carpets, etc., whether a bangle-maker makes bangles of glass or lac, and so on.

"Persons engaged in home industries must be carefully distinguished from those employed in mills, whether large or small, and whether under European or native management.

"Women and children who work at any occupation, of whatever kind not being an amusement or of a purely domestic character, such as cooking, must be entered in this column, whether they earn wages or not. If a man has several subsidiary occupations, the enumerator should enter in column 10, only that on which he spends the most time. In the case of dependents of a joint family, several members of which earn money, he should enter in column 11 the principal occupation of the eldest. Servants should not be shown as dependent on the occupation of their master."

Apart from the arrangement of columns, the main point of difference between the two sets of instructions is that in 1891 dual occupations were entered only where one of them was connected with agriculture, whereas at the present census, the entry of all dual occupations was provided for. The main object in view, however, was the simplification of the instructions, and in the general occupation tables no use was made of the additional information thus recorded.*

System of
classification.

305. The system of classification followed on the present occasion was based on that devised by Mr. Baines in 1891, and explained by him as follows:—

"The object in view is to group the entries in the census schedules as far as possible in accordance with the distribution of occupations in India in general, and at the same time to allow room for the designation of special features found only in certain provinces. It is superfluous, therefore, to discuss the classification in use at the census of communities further advanced in economic differentiation, or one based simply on the abstract laws of sociological science. The classification now published is not altogether scientifically correct, but it will serve its purpose if it collects under one head occupations known to be akin to each other, and keeps apart others which are but nominally related.

"2. There are certain classes of occupations in India which require a few general remarks before the details of the scheme are reviewed. In the first place, Government service is so comprehensive a term in this country, that for the purposes of classification it is necessary to restrict its application to the functions which cannot be dissociated from the main end of administration—protection and defence. Thus, special functions undertaken by the State in India beyond the primary duties above quoted are to be classed, not under the head of Government service, but under their special designation. Public instruction will come under education, and engineering, meteorology, agricultural training, medical practice, and administration under these heads respectively. It will be almost impracticable to effect a complete separation from the general title to which objection is raised above, as the combination of these special functions with that of the military or civil service of the Crown has been retained too closely in the schedules to admit of discrimination; but, as far as possible, the principle above enunciated should be rigorously applied. It is the same with the service of local and municipal bodies, where only persons actually engaged in administration should be entered under those titles. Engineers and road overseers or supervisors, sanitary inspectors or surveyors, schoolmasters and vaccinators, all have their special groups, irrespective of the source from which their salary is drawn. If the extent to which in India the functions of the State are exercised beyond the limits of protection be in question, the better source of information will be the periodical lists published by the Government of its employés, rather than a census return.

"3. A second class of occupations needing special treatment is the very large one of what have been called 'village industries,' one great characteristic of which is that the same person both makes and sells. Amongst the most important of these come the brass-smith, black-smith, cotton weaver, potter, tanner, carpenter, and the like, representing, with their fellows, the bulk of the artizan class throughout the country. Owing to the extension of towns, it is misleading to group such occupations under what would be otherwise an obviously suitable title, and some artizans indeed may have totally changed the character of the occupation on emigrating from the simple community to which they originally ministered. It has, therefore, been thought advisable to make no difference in the classification between those who make

* A limited use was made of it in special tables prepared in several provinces

and those who sell special goods, though in the sub-divisional groups there is room for the general dealer, the commercial agents, and other middlemen, and also for that class of dealers known by a special name in each province, which supplies certain articles which are almost invariably associated together throughout the country.

"4. After the above general remarks, the scheme may be taken up in detail. In the *Classes*, first place, the aggregate of the various means of livelihood are divided into the following main *Classes* :—

- A.—Government.
- B.—Pasture and agriculture.
- C.—Personal services.
- D.—The preparation and supply of material substances.
- E.—Commerce and the transport of persons, goods, and messages, and the storage of goods:
- F.—Professions, learned, artistic, and minor
- G.—Indefinite occupations, and means of subsistence independent of occupation.

Of these, the first and fourth are the most complicated, though, making allowances for the defective return in certain cases, the former should be nearly freed from all but those who can rightly be classed in it. The fourth has had to be minutely sub-divided lest confusion should arise.

"5. Subordinate to the seven *Classes* come 24 *Orders*, as shown marginally, bracketted according to their respective main heads. The first few explain themselves. As regards the seventh, eighth, ninth, tenth, and eleventh, the object which the article or service

ORDERS.

A {	I. Administration.	XIII Metals and precious stones.
	II. Defence.	XIV. Glass, pottery, and stone ware.
	III. Foreign and feudatory State service.	XV. Wood, cane, and leaves.
B {	IV Cattle-breeding, etc	XVI Drugs, gums, etc
	V Agriculture	XVII Leather.
	VI Personal services.	XVIII Commerce.
C {	VII Food and drink	XIX Transport and storage.
	VIII Light, firing, and forage	XX. Learned and artistic professions
	IX. Buildings	XXI. Sports and amusements.
D {	X Vehicles and vessels	XXII Complex occupations *
	XI Supplementary requirements	XXIII. Indefinite occupations.
	XII. Textile fabrics and dress	XXIV. Independent of work.

is intended for is placed more prominently than the material dealt with. On the other hand, from the twelfth to the seventeenth, the latter is regarded as more characteristic of the occupation than the object for which the prepared article is intended. The distinction is, of course, conventional only and not economic, as in both *Orders* the makers and the sellers of an article are combined, and it is only

* In the Imperial returns this was omitted, and Order XXIII was divided into XXII—General Labour, and XXIII—Indefinite or disreputable

in the eighteenth that special mention is made of those who return themselves as exclusively engaged in distribution.

"6. The classification next passes into sub-orders, and, where still further definition is thought necessary, into groups below the sub-orders. Of the latter, there are 77, which are shown, with their groups, in Appendix A. In some respects they are the most important items of the scheme, and it is possible that, with careful classification, the Imperial tables may be based on them, leaving detail below groups for supplementary or provincial returns. At all events, beyond a few generally prevalent occupations, it is probable that each Province will be best served by being given discretion to select under each group the items it considers most typical or otherwise important in the constitution of its population. Before this is done, however, every occupation and means of livelihood returned will have to be catalogued for classification, so that uniformity up to the point mentioned above may be ensured.

"7 In Appendix B is given a sample of the application of the scheme to a collection of items found in two or three of the Census Reports of 1881. It is not to be confounded with a complete index, such as was attempted on the last occasion, but will nevertheless serve as a general guide in preparing the detailed catalogues prescribed for the present census in Appendix B, page 12 of Circular M.

"8. A very important point to be dealt with in connection with the tabulation of occupations in India is how to deal with an occupation shown conjointly with some description of agriculture, or with the possession of land, or, again, which is locally known to be always combined with another non-agricultural occupation, of apparently quite a distinct character. It seems advisable to show all of the former class in the main return under their respective special headings, and in a supplementary return to show them with the agricultural connection as the main head, and the special occupation subordinate to each several sub division of the former. For example :—We may have a pleader who is a non-cultivating landowner, a money-lender who is also a non-cultivating landowner, a carpenter who is a cultivating tenant, and so on. In the general return these will appear under the items of pleader, money-lender, and carpenter respectively. In the supplementary return, after the total number of non-cultivating landowners who have no other occupation returned against them, will come the pleader, and after him the money-lender, whilst the carpenter will occupy a corresponding position under the head of cultivating tenant. In this way the total number of landowners and tenants and their families, so far as the census return is correct, will be obtained without detracting from the roll of the occupations which probably take up an equal or greater portion of the time of the person returning both. As regards the second class, no general heads can be prescribed, as the

combinations may differ in every province. Notorious instances are those of the tanner and shoemaker, shepherd and blanket-weaver, and, as shown by Mr Ibbetson for the Punjab, the fisherman, water-carrier, and public cook. Where the caste is used to denote the occupation, there need be no difficulty in providing a special heading for the complex functions in question. In other cases, local knowledge should be called in to point out which are the occupations almost always combined together, and these can be demarcated by a special note to the return. The instruction, however, that only the main occupation should be entered in the schedule, is against the chance of obtaining a complete return of non-agricultural combinations. All the same, Provincial Superintendents should suggest as soon as possible the heads of this class which they find can be distinguished in their respective Provinces."

At the present census the main division of occupations into Classes, Orders and Sub-orders described above remained unchanged and the only alteration consisted of the division into two of one of Mr. Baines' "Classes" and of two of his "Sub-orders." In the case of groups, however, although the general arrangement was maintained, there were many alterations in detail; some of the old groups were amalgamated or transferred to other sub-orders, while on the other hand, new groups were provided with the object of distinguishing (a) makers from sellers and (b) workers in factories from those engaged in hand industries. The scheme as thus revised, comprises 7 'Classes,' 24 'Orders,' 79 'Sub-orders,' and 520 'Groups.'

Dual Occupa-
tions

306. It has already been stated that the only general use made of the return of dual occupations was in cases where one of them was agricultural. In 1891 the non-agricultural occupation was, in all such cases, taken for the purpose of the general occupation table, and a separate return was prepared showing for each occupation the number of persons pursuing it in conjunction with agriculture. At the present census, dual occupations have been returned only for actual workers; the latter have been classed according to their principal occupations, whether agricultural or otherwise, and columns have been added to show the number of persons entered under each non-agricultural head who depend partly on agriculture as a subsidiary means of livelihood. In other words the figures given at the present census for rent-payers and rent-receivers represent the total number who returned these occupations as their principal means of support, whereas in 1891 the corresponding groups included only those who subsisted solely on these pursuits. The number of persons who follow agriculture as an accessory to some other occupation has been shown against the occupation concerned, but in only one province have the corresponding figures been given for persons whose main occupation is agricultural, but who are partially dependent on other means of livelihood. This subject will be further discussed in a subsequent paragraph.

Workers and
Dependents

307. The other important departure from the procedure followed in 1891 was in respect of the distinction between workers and dependents. In 1881, workers only were dealt with in the occupation table, but the results were so unsatisfactory that it was resolved at the next enumeration to endeavour to secure a return, not of the persons actually engaged on each occupation, but of the persons supported or maintained by it. The reasons which led to this decision were summarized by Mr. Baines as follows:—

"Before discussing the results of the enumeration of India by occupation, as qualified by the above general admissions of imperfection, some explanation is necessary of the scope of the returns and of the system on which they were prepared, because important innovations have been introduced into both since the preceding census. It has been stated above that the object of the present census was to obtain a view of the supporting power, at the time of the census, of each means of livelihood, whereas in 1881 the return was that of workers only, and persons of, so to speak, independent means. Thus no less than 53 per cent. of the population, or, as the return was by sexes, 37½ per cent of the males, and 69½ of the females, was excluded. If, therefore, the total strength of any particular group was in question, such as, for instance, the agricultural or the artizan class, recourse to approximation was necessary; and this had to be based on estimates of the probable number of heads of families, and of the numerical strength of their respective households. As there was no general tabulation of occupation by age, except in a few of the larger towns, the above computations had to be purely conjectural, and the postulates and methods of calculation differed in each province. But even as a record of the working population only, the results, in the opinion of the Superintendents of the census operations, in their respective provinces, were very defective, and so far as the return of working females is concerned, the figures were found by Sir W. Chichele Plowden, the then Census Commissioner for India, to be unworthy of examination. A few facts in confirmation of this view may as well be cited, which will show that the abandonment of the former system was neither premature nor based on inadequate grounds. First of all, of course, stands the inconsistency of practice in regard to the entry of the occupation of women which is based to a great extent on social considerations. While there is a strong and well defined line drawn between the upper and the lower grades of society, owing to

distinctions of caste or race, the women who actually do work are generally returned as workers in the lower section only, although they may be similarly engaged in various occupations in many of the higher classes. On the other hand, there is noted a general tendency to return the women of the middle classes, all over India, as following the occupation of the head of their household, whether they actually do so or not. This last fact was one of the inducements to adopt the scheme of return indicated by this inclination. Then, again, the distinction between the principal and his dependents or sharers is much valued in certain occupations, so the chief worker, especially the artisan, is disposed to ignore, in making the return, the aid rendered by the others with whom he may be connected. There is a similar inconsistency with regard to occupations dependent on the land. In some cases, the nominal occupant will alone be recognised, and the rest of the family returned as labourers, whereas in others, where the participation of the soil is based on different principles, the number of occupants or sharers will include all who have any interest therein, irrespective of the position of the patriarch. The young children of agriculturists, too, are as often as not entered as graziers, though their attention is gratuitously devoted to the family live-stock only. Elsewhere, they will be found to have been omitted from the workers altogether, or returned, in some instances, as farm servants. Other cases of a similar tendency can be adduced, but, on the whole, they reduce themselves to the above categories of inconsistency of treatment of subordinate or subsidiary interest in the family means of livelihood."

308. The instructions of 1891 provided for the entry of the word "dependent" after the occupation noted against non-workers, but this was merely in order to make matters easier for the enumerators, who would otherwise have been puzzled by the incongruity of showing, for instance, an infant as a cultivator or a female as a soldier, and in the course of tabulation the distinction was neglected altogether. At the same time the persons returned against each occupation were classified by sex and also by three age groups—'0 to 5', '5 to 15', and '15 and over'—and it was thought that this would afford a fairly accurate idea as to the number of persons who were actual workers*. In several provinces, and especially in Bengal, regret was expressed by the Provincial Superintendents at the failure to tabulate workers and dependents separately. At the present census, therefore, actual workers have again been distinguished from dependents; the latter, however, have not been left out of account but have been tabulated under the occupations from which they derive their support. We have thus, as in 1891, a return of the total population supported by each occupation, and also, as in 1881, a return of the number of persons actually following each occupation. The distinction by age, introduced in 1891 in lieu of a return of actual workers, has been abandoned, as no longer necessary, but on the other hand a new table has been prepared in some provinces showing occupations classified according to caste.

309. Having now explained at sufficient length the character of the information asked for and the manner in which it was tabulated, we will proceed to consider its signification and the value to be attached to it. In the first place it must be remembered that all that the census can tell us is the distribution of the population according to occupation on a single day, and this will vary greatly according to the season of the year. Amongst the great class of landless labourers the means of livelihood changes with the season, and the same man may be at one time a field-labourer, at another time an earth-digger, and again a porter, saltpetre-worker, paddy-husker, *pālki*-bearer, firewood-collector, etc.; so that the head under which he will appear in the Occupation Table depends on the date fixed for the enumeration. Some occupations, such as indigo manufacture and jute pressing, which at certain seasons afford employment to large numbers, were practically obliterated at the census, which was taken on the 1st March, while others, such as earthwork or the milling of rice in Rangoon which was then at its height, were unduly magnified†.

310. Secondly, it is far from being the rule that each person follows only one specified occupation. The division of labour has not yet proceeded very far in India, and the same man often combines several pursuits which in Europe would be quite distinct, and which are shown in different parts of the Occupation Scheme. The fisherman, for instance, is often a boatman, the money-lender, a landowner; the cultivator, a day labourer; the village chaukidar, a cultivator, and the like. It would have been impossible to deal with all such cases and it has already been explained that the only dual occupations generally

Limitations of the return —
(1) Figures refer to one particular date

(2) They show only the principal means of support

* The age distribution, though given in the Provincial, and most of the State, Volumes was not shown in the Occupation Table for India as a whole.

† According to the census there were only 8,240 workers in indigo factories but in the Financial and Commercial Statistics for British India (Ninth issue) the number of persons thus employed during 1900 is placed at 240,333.

tabulated were those where the subsidiary pursuit was agricultural. In other cases only the main occupation was looked to.*

It follows that the census tables purport to show, not the total number of persons who follow each avocation, either alone or conjointly with something else, but merely the number who returned it as their chief means of subsistence † Thus in Bengal the total number of village chaukidars according to the police returns was 152,287, but only 88,936 were entered under this head in the main occupation table. The difference is due to the fact that in many cases the persons thus employed, who are seldom able to live solely on their pay, which never exceeds six, and is sometimes only two, rupees per mensem, reported some other pursuit to be their principal one. A special table showing the subsidiary occupations of cultivators and field labourers indicates that 36,434 persons entered under these heads were also chaukidars and there must have been about 27,000 more who returned fishing, general labour or some other form of employment as their principal means of support.

(iii) Mixed
occupations

311. The same remarks apply to the numerous cases of occupations of a mixed character which are not specially provided for in the scheme; these had to be assigned, more or less arbitrarily, to one or other of several special heads shown in the scheme under either of which they might be classed with almost equal propriety. The shepherd, for example, finds a place in one group, in Order IV, and the blanket-weaver in another, in Order XII, but it is the rule rather than the exception for the same man to combine the two functions. The Māli or garland-maker also makes flowers of pith and fireworks, and money-lending and grain-dealing are in many parts merely different aspects of the same business. There are moreover certain recognised shops which have no corresponding equivalent in English, such as that known in Bengal as a *manohāri dokān*. In 1891 the keepers of such shops appear to have been treated as stationers, but although stationery is sold, this is by no means the only, or indeed the most important, class of goods dealt in; amongst other articles, may be mentioned clocks, chairs, glass, glass bangles, looking-glasses, enamelled plates, toys, biscuits, caps, buttons, stockings, handkerchiefs, shoes, brushes, woollen goods, tobacco, soap, perfumery, tin boxes, walking-sticks, and *hukkās*, and at the present census they have been classed as general dealers in the Imperial table.

Not only was there much uncertainty in assigning to a particular group persons returned as living by these mixed occupations not provided for in the scheme, but it was often clear that the occupation named by the enumerator was only one of several actually followed. Thus a Dom is a scavenger and a drummer as well as a basket-maker, and his wife is an accoucheuse, but both would often be entered under only one of these heads. Many persons who deal in various kinds of goods and also lend money were often returned either as money-lenders or as dealers in some special articles. In Madras—

“The ordinary vernacular term for the village cobbler is ‘*chakkilyan*’, and it would never occur to an enumerator that this was an inadequate description of a man’s occupation. But in the scheme leather-dyers, shoe, boot, and sandal-makers, tanners and curriers, sellers of manufactured leather goods, sellers of hides, horns, bristles, and bones, water-bag, well-bag, bucket and ghee-pot makers are all differentiated. The village cobbler is probably any or all of these by turns, and it was not easy to ensure that the entry ‘*chakkilyan*’ was always consistently classified under the most appropriate of these heads.”

(iv) Mis-
takes in the
Schedules

312. The inaccuracy of the entries in the schedules is a fertile source of error. There is throughout India much confusion of thought between a man’s caste, which connotes his traditional occupation, and the means of livelihood by which he actually subsists. A man of the barber caste will often call himself a barber, even when his income is mainly derived from agriculture or some other employment, and a Bráhmaṇ, especially if a mendicant, will say he is a priest, even though he may never have exercised any priestly function beyond perhaps dipping his toe in a bowl of water for the delectation of some pious Sudra, who will not break his fast until he has had a draught of water thus sanctified. In the Punjab Mr. Rose considers that the figures for scavengers

* In the Punjab, United Provinces, Assam, etc., a limited number of selected dual occupations were tabulated and in Bengal a return was prepared of the non-agricultural occupations of persons mainly agriculturists.

† The same difficulty exists in England also and Dr. Longstaff has suggested that it should be met by entering the person under both headings, making the requisite correction when totalling the occupations. (Studies in Statistics, page 224) This, however, would involve an amount of elaboration which would not be possible in the time allowed.

have been swollen by the wholesale inclusion of Chuhras, who are by traditional occupation sweepers, but who in practice more often live by agricultural labour. In the same province the blacksmith, or "Lohár," by caste is often a carpenter, or "Tarkhán," by occupation and, if asked his trade, will reply Lohár Tarkhán, so that it is a matter of pure chance under which head he is shown. There is also a good deal of intentional mis-statement, and the occupation which is considered the more respectable is often returned instead of that which is really the principal means of subsistence. For example a person who possesses a minute holding of land would return himself as a cultivator, even though for nine months of the year he supported himself by working as a coolie, and in Madras toddy drawers and leather workers are said in some cases to have described themselves as agriculturists.

313 The above causes of error are bad enough, but even more mistakes are probably due to the vagueness and want of precision with which occupations are described. In spite of all the care taken to prevent it, the schedules literally teemed with words which conveyed no definite meaning whatever, and the classification of which was a matter of great uncertainty. Thus in Bengal it is stated that—

"Entries such as *Izaradán* (farmer), peon, contractor, *mistrá* (artificer), coolie and *chúhará* (service) were very common. There were numerous other entries which, though not so vague as the above, could still be classed under several different heads of the scheme, such as railway coolie, doctor (un-specified), mendicancy (unspecified), engineer, service in mill, cloth-seller, *krishu-majur*, *go-rakshyak*, *kaila-bikray* (*kaila* means 'charcoal' as well as 'coal'), wood-seller and the like. Many of these terms were most difficult to deal with, and although a clue was often furnished by the locality where the person was enumerated, or by the caste, sex and other entries on the slip relating to him, it was inevitable that there should be a considerable amount of guessing, and it would be absurd to pretend that in every case the persons concerned were assigned to the right groups in the occupation scheme. All that can be said is that we did the best we could, and that, considering the large numbers dealt with, it may be hoped that the mistakes which occurred to some extent cancelled one another."

Similarly in Madras Mr. Francis writes—

"The mass of the people here are totally illiterate, and proportionately inaccurate. The native of South India's idea of the way to fix the time of day at which an event occurred is to say that it happened when the sun was so many palm-tree tops high in the heavens, and persons with such rudimentary notions of exactness as this can hardly be expected to give a clear account of their means of subsistence, especially when these are numerous or complex. The schedules consequently contained thousands of the vaguest entries which could not possibly be really satisfactorily classified. For instance, the entry 'cotton business' might mean that the person referred to was a weaver of cotton cloths, or of cotton carpets, or of cotton tape, or, on the other hand that he was a cotton-cleaner, a cotton-spinner, a cotton-sizer, a cotton dyer, or a cotton-calenderer, fuller, or printer, or even that he was a dealer in cotton, or cotton cloths, or cotton thread. Yet the groups in the Sub-order 40—Cotton, and elsewhere require all such persons to be differentiated. 'Smith,' again, might mean gold-smith, brass-smith, copper-smith, white-smith, or black-smith. 'Estate coolie' might mean that the individual was employed on a coffee estate, or a tea estate, or a cinchona estate, or on one where all three of these products were grown. 'Clerk' might mean any one of the 29 different kinds of clerks provided for in the various parts of the occupation scheme. Fifty similar cases could easily be instanced."

"Sometimes, no doubt, the caste entry in the schedule would help in the determination of the meaning of vague entries of this description. 'Weaver' may mean cotton-weaver, or silk-weaver, or a weaver of jute gunny-bags, or of grass mats, or of goats' hair blankets, and all of these have to be distinguished. It, however, the caste entry was Patnúl the odds were largely in favour of the individual being a silk-weaver, as Patnúls usually weave in that material only, while if it was Kuruba it was practically certain that he wove nothing finer than blankets. In the absence of any such assistance the only course open was to classify weavers unspecified as weavers of cotton, on the ground that it was more probable that they wove cotton than any other material."

314. The efforts made to distinguish between makers and sellers and between workers in factories and those engaged in the corresponding home industries have not met with very great success. So far as village occupations are concerned, their most characteristic feature is that the same person is the manufacturer and also the retail dealer. The confectioner for example makes his sweets and sells them; the potter retails the earthen vessels which he moulds, the person who makes bangles also vends them, and the fisherman usually himself takes to market the fish which he catches. The difficulty of drawing the line between the two functions is dwelt on by the Superintendents of all the larger provinces. There is a similar consensus of opinion regarding the attempt to obtain a separate return of workers in factories, and Mr. Francis says "the statistics of workers in factories must be frankly admitted to be far below any

(v) Vagueness of entries

(vi) Uncertainty respecting makers and sellers and factory workers

others in Table XV in point of accuracy, not to say entirely worthless" Only 118 persons were shown as working in the carpet factories of Amritsar city, and Mr Rose thinks that the rules must have been misinterpreted and the term taken to apply only to places in which machinery is employed. The discrepancies between the results of the census and those furnished in the Return of Large Industries published by the Director General of Statistics are often very marked, and as the latter are specially collected and may be presumed to be fairly accurate, it is a question whether any useful purpose is served by attempting to obtain similar details through the agency of the census.

(vii) Errors in
Compilation

315. Even if the original return had been clear and free from error there was still ample room for mistakes in the course of compilation. The system of classification varied. In some provinces the Superintendent himself passed orders as to the group to be assigned to each occupation found in the schedules, the occupations with their classification being entered in an alphabetical index, which was added to and re-written from time to time, while in others the duty was delegated to the officers in charge of tabulation centres or to selected subordinates. Under the latter system uniformity was impossible, and even where the work was done on the basis of an alphabetical index passed by the Superintendent himself, there was still ample room for mistakes. In the first place, the men who sorted the slips might neglect the rule which required that each occupation should be entered exactly as it was found on the slip, and might add together items which, though apparently similar, were exhibited in different groups of the occupation scheme. Secondly the men who affixed the group numbers might rely on their memory, instead of consulting the index, and so make mistakes; and thirdly, the process of compiling such a vast array of separate items* was a very elaborate one, and there was continual danger of misposting. In most provinces the system of check was sufficient to ensure the detection of a large proportion of the mistakes which were made, but there must always have been a certain residuum of error.

Instances
of above diffi-
culties

316. The above observations will become more clear if a few practical instances are given of the effect of differences of classification and of the way in which mistakes can creep in. In Bengal many labourers who were shown as 'coolies unspecified' in 1891, have at this census been classed under the agricultural head and the result is that nearly 5 million persons have been shown in Order V as farm-servants and field-labourers compared with rather more than a million and a half in 1891, while Order XXII contains three million persons less than it did on that occasion. In Madras, the number of general labourers has declined, in comparison with 1891, from about 2½ millions to half a million while the agricultural labourers number 7½, as compared with 4, millions. In Rapputana Captain Bannerman says —

"While the watchmen and weighmen have increased, the porters have greatly diminished. Difference of classification seems to be the main cause, for it appears that in 1891 many of the field-labourers were classed as porters, the entry in the schedules having been simply the comprehensive term *mazduri*."

In Burma the number of field-labourers has risen from 682,000 to 1,322,000,

IN 1891		
Land occupants	.	2,533,784
Tenants and sherrers	.	787,003
TOTAL	.	3,270,787
IN 1901		
Rent-receivers	.	713,508
Rent payers	.	1,245
TOTAL	.	717,753

but here the increment is due mainly to the entry under this head of "cultivators pure and simple," who might more accurately have been classed as "rent-payers", the number of persons under this latter head, as well as that of rent-receivers, is now absurdly small, and the aggregate number of persons shown as having an interest in land is less than a quarter as great as it was ten years ago. In Gujarat, "a province where

tenancies are common, the half million tenants registered in 1891 have been reduced to 576 and it is probable that a considerable proportion of the tenants have been wrongly classed as labourers." The vague entry of "service," which may mean practically anything, but in Bengal at least comparatively seldom refers to domestic employment, was shown in that province, at the present

* With 720 groups of occupation, two sexes, and separate entries for workers, workers partially agriculturists, and dependents, there might be as many as 3,000 separate headings for each unit of compilation.

census, under a separate heading amongst "indefinite occupations" in Order XXIII; this Order thus includes 216,000 persons who in 1891 were apparently entered under the "Miscellaneous" group of Order VI—Personal and Domestic Services. In the Punjab a marked decline in the number of petty Government servants is accounted for on the hypothesis that the enumerators in many cases entered "service" without further details. In Sind, in 1891, all cultivators who personally disposed of their produce were classed as grain dealers. In the Punjab grain dealers now number 339,852, compared with 36,274 in 1891 and the only reasonable explanation seems to lie in some similar freak of classification. In the same Province the decline in the number of furniture dealers from 4,765 to 479 is said to point to some error in tabulating the results, and a similar explanation alone can account for the presence of 209 shipowners in Nahan, 118 insurance agents and under-writers in Gujranwala and 53 piano-tuners in the Chenáb Colony. In Madras the figures for farm servants are "most untrustworthy," and some districts show no prisoners in their jails. The Assam returns fail to show any coal miners in the Khasi Hills, while those for Burma include 6,415 vermin and animal catchers who appear to have no real existence. In Bombay the decline in the number of mechanics from 9,911 to 5,851 is "hardly credible." Speaking of the previous census Mr. Enthoven writes:—

"All the pig breeders and dealers of the Presidency, with a few trifling exceptions, are shown to be in Belgaum, and consist of 9 males and 307 females. Half the population supported by piano-tuning are found in the Sholápur District, and are women. The sale of photographic apparatus supports 380 persons, 163 of whom are in the Panch Maháls, and they are almost exclusively females.

"If a reference is made to Table XV, Part I-A for 1901, it will be seen that there are now only 18 persons returned as supported by pig breeding in the whole of the Presidency, exclusive of Native States, that females dependent on piano-tuning are no longer to be found in Sholápur; and that the sale of photographic apparatus has ceased to offer an attractive livelihood to the female population of the Panch Maháls. To put this in other words, Mr. Drew's "strange" entries were obviously slips in the Abstraction/offices. Doubtless the slip system introduced on this occasion has afforded a greater measure of security than formerly existed against such errors. But the object of referring to them here is to draw attention to the great risk of incorrect entries when very large figures are being elaborately classified. From this point of view, it is useless to trace in too great detail the variations in entries under occupational groups from census to census. The broad distinctions between classes, and perhaps orders are in most cases maintained without great difficulty. Further down the classification basis becomes uncertain, and the conclusion which can legitimately be based, in most instances, on an extraordinary difference in the number entered at the two censuses, is merely that the increase is owing to there being more, or the decrease to there being less."

The Bombay table for the present census is not altogether free from similar improbabilities. Thus in iron foundries the superior staff is placed at 4,130 while there are only 257 persons shown as operatives, there are 11,322 owners, managers and superior staff attached to clothing agencies, but only 4,208 operatives and other subordinates, and in aerated-water factories the corresponding figures are 4,100 and 431.

317. I have drawn attention to these points at some length in order to show how useless it is to expect from the Census detailed statistics of occupation. In his report on the Census of India in 1891 Mr. Baines wrote:—

"It may be gathered from these remarks that a high value is not attached to the results of the census of occupation. This is true, and the opinion is not confined to those who have had the administration of the operation in India alone. In some of the countries in Europe the subject is excluded altogether from the enumeration, and in one at least, which need not be named, much forethought and many elaborate instructions were rewarded by results with which the census authorities thought it advisable not to mislead the public, by including with the rest. In Germany, as well as in the United States, it has been decided that a comprehensive industrial survey, obtained by dint of detailed enquiry, spread over a considerable time, is preferable to the rough and ready return which is all that it falls within the capacity of a synchronous census to furnish."

Similarly, in the report on the Census of England and Wales in 1891 (page 35) it is said that—

"A census .. does not supply data which are suitable for minute classification or admit of profitable examination in detail. The most that it is reasonable to expect from data so collected is that they shall give the means of drawing such a picture of the occupational distribution of the people as shall be fairly true in its main lines, though little value can be attached to the detailed features. It is not wise to demand from a material a result for the production of which it is unsuited."

Proposed
simplification
of classifica-
tion in future

In a paper read before the Royal Statistical Society * Mr. Baines repeated the opinion that detailed information as to the industrial organization of a country cannot be obtained by the machinery of the general census, and in the discussion which followed the reading of this paper, Sir Robert Giffen expressed agreement with Mr. Baines as to the undesirability of attempting to do much regarding occupations in an ordinary census, and admitted that, if an elaborate enquiry were desired, it could only be carried out by a separate proceeding, quite outside the census and conducted by a different staff.

All that can be expected, or that should be attempted, is a broad general division of the population under a few main heads. Accuracy in details cannot be looked for, and it is not claimed by any of the Provincial Superintendents. Mr. Francis for example writes as follows :—

“The broad totals of Classes and Orders, which are those which are mainly required for administrative purposes, will be found to be reliable, even when examined district by district. As one goes further into detail, however, and the law of large numbers ceases to operate, there are cases in which less faith can be placed in the figures”

318 It is true that, the larger the aggregate taken, the smaller is the risk of error, but one of the unavoidable defects of a very elaborate scheme is that it often separates occupations which are very nearly allied. Thus agricultural labourers are classed in Order V and general labourers in Order XXII, and we have seen that in Bengal more than three million persons who were shown in the latter group in 1891 have now been relegated to the former. Shepherds are in one Order and blanket-makers in another; boatmen and fishermen are similarly separated, and so are religious mendicants and ordinary beggars, although in practice it is often impossible to say with certainty to which head any particular entry should be allocated. Grain dealers and the vendors of special articles are shown in different Orders of Class D, but “shopkeepers unspecified,” of whom there are $1\frac{1}{2}$ million, are included in Class E. It follows that, even when the larger heads in the scheme, such as Orders or Classes, are dealt with, the results are vitiated, so far as comparison with the previous enumeration, or between different parts of India is concerned, by the want of uniformity in dealing with the details. It will be seen further on that nine-tenths of the population follow a limited number of simple occupations, and it seems to me that, if the scheme were in future restricted to about 30 comprehensive heads, we should obtain a better general view of the functional distribution of the people than under the present system.† We should then know how many persons were land-occupants, how many landless labourers, how many boatmen and fishermen, and how many weavers, and the like. For the details regarding many special heads, such as jute or cotton mills, tea-gardens, coal-mines, etc., statistics of a far more reliable character than those offered by the census can be obtained from the returns compiled by the Director-General of Statistics, a great deal of information regarding other occupations can be gleaned from the Income-tax returns, while the strength of the army and the civil services, the number of police and village watchmen, of prisoners in jails, etc., can be gathered from various official publications. Such statistics might well be compiled in connection with the census, but they should be obtained in the manner here indicated and not through the agency of the enumerators.

Reference to
statistics

319 The actual figures obtained from the return of occupations will be found in Table XV. The main features of the Table are, as usual, illustrated by means of proportional figures in subsidiary tables at the end of the Chapter, *viz* :—

- I General distribution by occupation
- II Distribution of the Agricultural, Industrial, Commercial, and Professional population by provinces and states
- III Number per 1,000 supported by each Order of occupations.

* Journal of the Royal Statistical Society, Volume LXIII, Part I.

† At the recent census of Cuba all occupations were classed under 18 main headings. The difficulties attending a correct classification of occupations in India according to any elaborate scheme have only now become apparent. The scheme devised by Mr. Baines in 1891 differed in so many respects from the previous one that no comparison between the results of the two censuses was possible, and it is only now, when the same scheme has been retained in all its essential features, that the great variations which may take place solely owing to changes in classification, mistakes and the like, have made themselves noticeable. Prior to the tabulation of the results of the present census no one thought of suggesting any radical change in the scheme drawn up in 1891 which, from an abstract point of view, seemed as good as any that could be devised.

‡ The collection at the Census of statistics regarding persons under instruction has been abandoned on the ground that this information is given in the reports of the Department of Public Instruction, and the same principle applies to the endeavour to secure by the agency of the census detailed information regarding occupations which is already compiled by a separate agency.

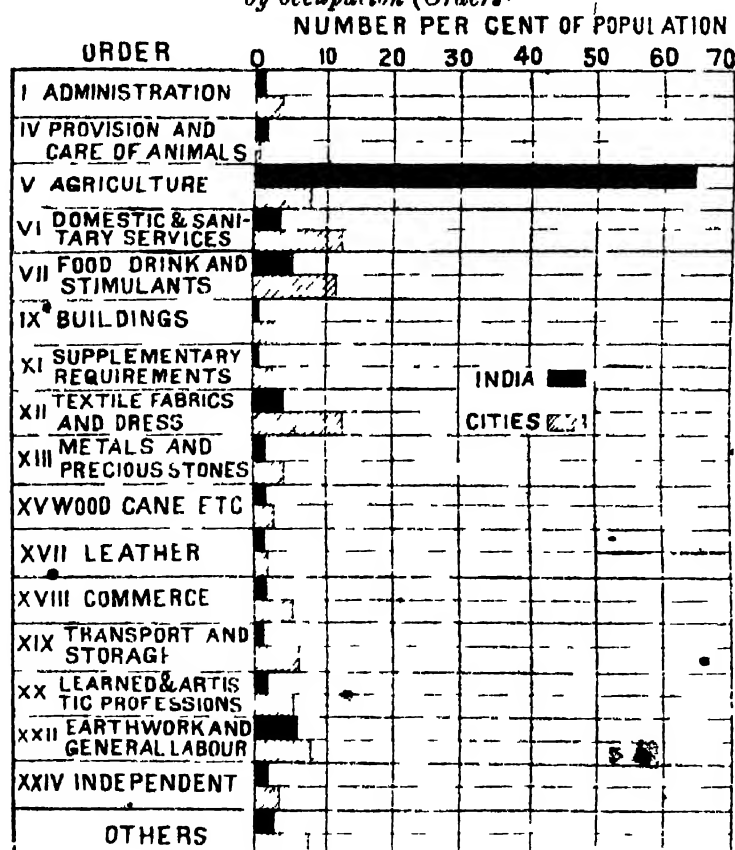
- IV Number per 10,000 supported by various primitive occupations in each province and state
- V. Occupations of females by Orders, and selected Sub-orders and Groups
- VI Proportion of workers to dependents, and of female, to male, workers in certain occupations
- VII. Occupations combined with agriculture as a subsidiary pursuit
- VIII Comparison of occupations with 1891 by Classes, Orders, and Sub-orders
- IX. Comparison of agricultural population with 1891.
- X. Main distribution of occupations in cities
- XI Large industries.

Main Features of the Return.*

320. Before dealing with the minor heads of the occupation scheme it will be desirable to view the results from a more general point of view and to note the functional distribution of the people according to the larger divisions. The most striking feature of the return is the immense preponderance of agricultural pursuits. Nearly two-thirds of the total population have returned some form of agriculture as their principal means of subsistence; 52 per cent. are either landlords or tenants, 12 per cent. are field labourers, and about 1 per cent are growers of special products and persons engaged in estate management, etc. In addition to these, about 2½ per cent, who mentioned some other employment as the chief source of their livelihood, are also partially agriculturists, and another 6 per cent, who have been shown under the head of "general labourers", are doubtless in the main supported by work in the fields. About 15 per cent of the total population (including dependents) are maintained by the preparation and supply of material substances; and of these more than a third find a livelihood by the provision of food and drink, and a quarter by working and dealing in textile fabrics and dress. Domestic and sanitary services provide employment for very few, and the number of persons who subsist by this means is less than 1 per

Population supported by each Class of occupations

Diagram showing the general distribution of the population by occupation (Orders)



cent of the population. The occupations of about 2½ per cent. fall under the head "Commerce, transport and storage," the number engaged in "commerce" being slightly greater than that in "transport and storage." Government service and the "learned and artistic professions" are the principal means of support of 19 and 17 per mille respectively.

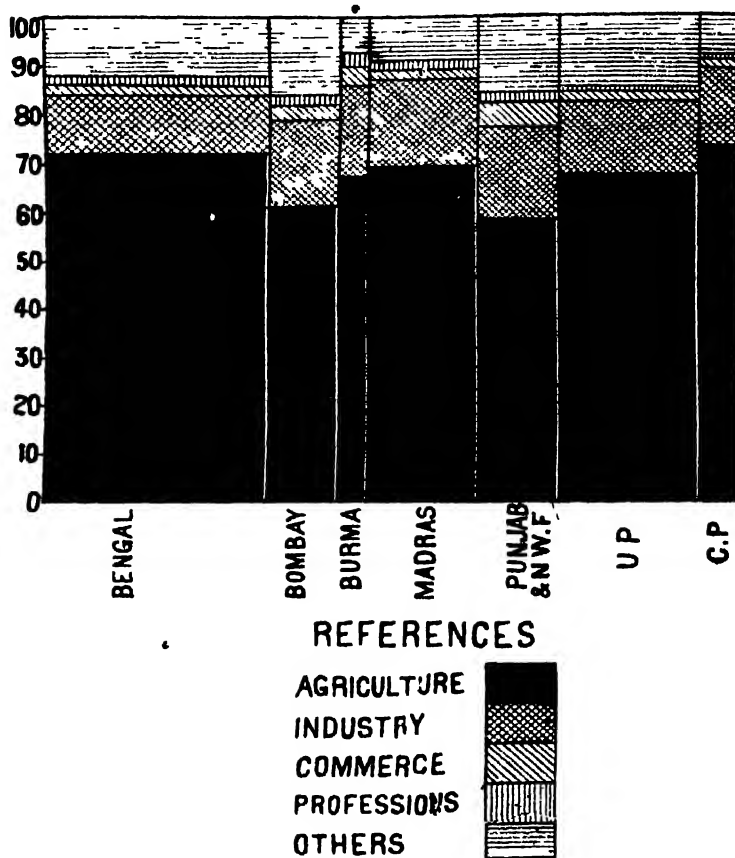
The above proportions refer to the total population, those for cities which are also illustrated in the annexed diagram, follow very different lines. In these large centres of population, instead of two-thirds, barely one-twelfth of the population are dependent on agriculture, and the number engaged in the "preparation and supply of material substances" rises from one-seventh to two-fifths, one-eighth derive a livelihood from "commerce" and nearly as many from personal and

domestic services; one-eleventh from "unskilled labour," and one-fourteenth from Government service.

* In the discussion which follows occasional instances of repetition will be noticed. It is probable that this Chapter will be used chiefly for purposes of reference, and it seems therefore, important to make each portion complete in itself in all essential particulars.

General proportions in main provinces

321. The foregoing remarks refer to the main distribution of occupations in India as a whole. The diagram in the margin has been prepared to indicate for the seven larger provinces the number of persons who are chiefly supported by Pasture and Agriculture (Orders IV and V), Industries (Orders VII to XVII), Commerce (Orders XVIII and XIX), Professions (Orders XX and XXI), and "Other means of subsistence." Of the provinces dealt with in the diagram, the proportion of persons dependent on agrestic pursuits is highest in Bengal, the Central Provinces and Madras, but it is equally high, if not higher, in Assam, Baluchistan, Coorg, and Kashmir. So far as the provinces shown in the diagram are concerned, industries support the largest relative number of persons in the Punjab, Burma, Bombay, and Madras, but the proportion is far greater in the small States of Cochin and Travancore. The general tendency of industries is towards aggregation in large centres, and the proportion returned under this head varies greatly even in the same province, *e.g.*, in the Punjab, where it ranges from less than 4 per cent in Kurram to over 31 per cent in Jhang, and in Bombay, where it lies between 4 per cent in Thana and 35 per cent in Surat. The commercial and professional classes everywhere form but a very small proportion of the population. The head "Others" which includes 'Earth-work and general labour,' 'Domestic and Sanitary Services,' 'Government,' 'Indefinite and disreputable occupations,' and 'Persons independent of work,' is made up mainly of the two heads first mentioned which contribute respectively 45 and 27 per cent of the total.



NOTE.—The base of each rectangle is proportional to the total population of the Province. The height shows the percentage of the population which is employed on each class of occupation.

322. Another method of viewing the occupation statistics from a general standpoint is by picking out the occupations commonly followed in every village, *i.e.*, those which, taken together, meet all the requirements of ordinary rural life. The number per 10,000 of the population who subsist by these primitive occupations in India as a whole is noted in the margin. Similar details for each of the main provinces will be found in subsidiary table IV at the end of the Chapter. The occupations as there entered are to be understood in the widest sense and do not bear the more restricted meaning assigned to them in the classified scheme. The term 'general labour' for example includes not only the ordinary coolie, but also flour-grinders, paddy-huskers, tank-diggers and other earth-workers, *palki*-bearers, firewood-collectors, etc. Cattle-breeders and dealers,

Village industries

322. Another method of viewing the occupation statistics from a general standpoint is by picking out the occupations commonly followed in every village, *i.e.*, those which, taken together, meet all the requirements of ordinary rural life. The number per 10,000 of the population who subsist by these primitive occupations in India as a whole is noted in the margin. Similar details for each of the main provinces will be found in subsidiary table IV at the end of the Chapter. The occupations as there entered are to be understood in the widest sense and do not bear the more restricted meaning assigned to them in the classified scheme. The term 'general labour' for example includes not only the ordinary coolie, but also flour-grinders, paddy-huskers, tank-diggers and other earth-workers, *palki*-bearers, firewood-collectors, etc. Cattle-breeders and dealers,

Occupation	Number per 10,000 of population
1 Landlords and Tenants	5,286
2 Labourers	1,869
(a) Agricultural Labourers	1,139
(b) General Labourers	730
3 Stockowners, milkmen, and herdsmen	165
4 Fishermen and boatmen	106
5 Oil pressers	63
6 Toddy-drawers and sellers	31
7 Grain-parchers	26
8 Leather workers	98
9 Basket-makers, scavengers, and drummers	104
10 Grocers and confectioners	80
11 Grain dealers and money-lenders	111
12 Vegetable and fruit sellers	18
Carried over	7,990

Occupation	Number per 10,000 of population
Brought forward	7,990
13 Makers and sellers of bangles	12
14 Silk-worm rearers and silk-weavers	10
15 Cotton workers (not in mills)	240
16 Goldsmiths and blacksmiths	97
17 Brass, copper, and bell-metal workers	13
18 Carpenters	86
19 Potters	76
20 Tailors	39
21 Other shop keepers	52
22 Barbers	77
23 Washermen	68
24 Priests	60
25 Village quacks and midwives	14
26 Mendicants	167
TOTAL	9,031

milkmen and herdsmen, are similarly grouped under one head, and fishermen, boatmen, and fish sellers, under another. It has already been explained that the subdivision of labour in India has not proceeded so far as the general classification scheme would indicate, and by adding together these and similar allied occupations, which are generally followed, either at different times or concurrently, by one and the same person, the differences due to the vagaries of the original return or of the classi-

fication in the census offices have to a great extent been eliminated.* In the case of agricultural and general labourers the border line is, as already explained, most uncertain; and we have already seen that in some provinces large transfers have taken place between the two heads as compared with 1891. The two items have been entered separately in the subsidiary table as it will be shown further on that in one or two provinces there has been some confusion between cultivators and agricultural labourers but, for the present purpose, it is better to look only to the total of the two groups combined

In India as a whole about nine persons out of ten are supported by the simple occupations here referred to. The proportion is above the average in Bengal the Central Provinces, Madras and the United Provinces and below it in the Native States, Assam, Bombay, Burma, and the Punjab. The low figure for Assam is due to the extensive tea industry which affords employment to one-tenth of the total population of the province; if persons thus supported are left out of the account, it is higher there than in any other part of India.

323. A peculiar feature of Indian rural life is the way in which each village is provided with a complete equipment of artizans and menials so that, until the recent introduction of western commodities, such as machine-made cloth, kerosine oil, umbrellas and the like, it was almost wholly self-supporting and independent. The subject is somewhat trite, but the following extract from Mr. Rose's Report presents some of the main facts in a new and interesting light:—

Organization
of village
industries

"Under the old social system of these Provinces every tract, and, to a certain extent, every village, was a self-contained economic unit, in which were produced the simple manufactures required by the community. This system facilitated the development of a caste system based on hereditary occupation. Below the land-holding tribe, and subject to its authority, were the various sacerdotal, artizan and menial classes, which have more or less crystallized into castes and these classes were, economically and socially, closely dependent on the dominant tribes who owned the land and controlled its allotment. These castes were all more or less servile, and were paid by a share of the produce of the soil, or, more rarely, by fixed allowances in kind, cash payments being probably a very recent innovation. But the better classes among them were also assigned land for maintenance, and this system was especially fostered by the priestly groups, so much so that, according to Pathan custom, all Saiyads, all descendants of saints, and all descendants of *mullahs* of reputation for learning or sanctity are entitled to grants of free land called *seri*, the amount of the grant varying according to the degree of inherited sanctity. In precisely the same way to Brahmins were given grants of land (*sasan*), varying in extent from a group of villages conferred by the State, to a mere plot granted by the village community or a section of it. The possession of such a grant conferred a high social status on the grantee, so that the *Sasani*, or benefited, Brahman of the hills stands higher than those who hold no such grants. Similar grants were also made to any religious personage, or to a shrine or temple, and, by an extension of the same principle, to men of the artizan classes. These grants were alike in character and conferred no absolute right of ownership, the grantee having an inherent power to resume a grant if the purposes for which it was made were not fulfilled, but the grants varied in degree, those to shrines or sacred personages to all intents and purposes conferring a permanent right of possession hardly distinguishable from ownership, and those made to menials being wholly precarious. The

* On the other hand some of the items, such as "other shopkeepers," and "priests," include persons who do not belong to the village community, but who cannot be excluded as they have been classed under the same head with those who do, *vide* paragraph 332.

tenures thus conferred, whatever their precise legal nature, enabled the servile classes to eke out a living by cultivation, but it left them menials, or artizans, or priests as before, and custom forbade them to change their abode without the consent of the landholders. And if the dominant tribe migrated its dependent castes went with it, the Brahmins of the tribe, its Bhāts, Doms, and other menials migrating also, a custom which even now may be found in operation in many cases in the Chenāb Colony.

"Thus each tribe, at least, if not each village, was, economically, a water-tight compartment, self-contained and independent of the outside world for the necessities of life, but for commodities not obtainable within its own borders it depended on foreign sources of supply and on the outside castes such as the Labanas, or salt-traders, who formed no part of the tribal or village community. Thus there have never arisen, in this part of India, any great industries. Foreign trade, necessarily confined to the few large towns, was limited to superfluities or luxuries, and such industries as existed were necessarily on a small scale. Further, inasmuch as each community was absolutely independent, as far as necessities were concerned, the few industries which supplied luxuries never became firmly rooted and have succumbed at the first breath of competition. Everywhere in our official literature one reads of struggling industries in the small towns, though fostered by intermittent official encouragement, dying of inanition. The causes seem obvious enough. Everything essential can be, and for the most is, made in the village or locality, so that there never is a demand for imported articles of ordinary make, those made by the village artizans, however inferior in quality, satisfying all requirements. In good seasons there is some demand for articles of a better class, but when times are bad that demand ceases, and the industry languishes. Thus the village industries alone are firmly established. If the crop is short, everyone from the landlord to the Chuhra, receives a diminished share, but small as the share may be, it is always forthcoming, whereas in the towns the artizan is the first to suffer in times of scarcity, and if the scarcity is prolonged, the urban industries are extinguished. But if, on the one hand, these industries are precarious, the village industries are firmly established and will probably die hard in the face of the increasing competition which menaces them."

324. The same subject is dealt with as follows in the Bengal Report:—

"The duties and remuneration of each group are fixed by custom, and the caste rules strictly prohibit a man from entering into competition with another of the same caste. In many districts, the barber, washerman, blacksmith, etc., each has his own defined circle (*bril* or *shashan*), within which he works, and no one else may attempt to filch his customers, or *jujmāns*, from him on pain of severe punishment at the hands of the caste committee. The exclusive right to employment by the people in the circle constituting a man's *bril* is often so well-established, that it is regarded as hereditary property and, with Muhammadans is often granted as dower. The method of payment often consists of a fixed sum for regular services *e.g.*, to the blacksmith for keeping the plough in order, to the barber for shaving and hair cutting, to the leather-dresser for supplying country shoes and leather straps for plough-yokes and the like, and a special fee on particular occasions, such as to the village midwife, who is usually the wife of the cobbler or drummer, for the delivery of a child, and to the barber on the occasion of marriages.

Much curious information on this subject is given by Dr. Grierson in his little book on the Gaya district, where the old customs have been preserved to a greater degree than in most other parts of the Province. The custom is there for each artizan to take his recognised share of grain when the crop has been reaped and brought to the threshing-floor. The carpenter and blacksmith are each given about a maund of grain (half being rice) yearly for each plough, while the Chamār gets 12 seers. The Dom or basket-maker receives no regular income. He is paid for what he does, and his only perquisite is the right to take the table leavings of all castes, except the Dhobā, whose remains he scorns to touch. The Telī also draws no fixed stipend, but receives 4 seers of oilseed for every seer of oil he is required to supply. In addition to these regular payments from the villagers, the artizan or village servant often holds a small plot of land rent-free, in return for which he supplies the zamindār with earthenware, or shaves him and his family and cuts their hair, etc., as the case may be.

The same system is in vogue in Bengal proper, but to a more limited extent. The Dhobā and Nāpī usually enjoy small grants of rent-free land from the zamindārs, and the *pālī*-bearers and Hāris also do so occasionally. They receive fixed remuneration, in cash or grain, from the villagers, but the present tendency is towards payment by the job. The village carpenters and blacksmiths are usually paid in cash for the actual work done. The Nāpī often enjoys the exclusive right to work for people in a recognised circle, but this is not usually the case with the other village servants and artizans. The village organization, with its complete outfit of servants and artizans who render it independent of all outside help, which is so common in other parts of India, never seems to have been fully developed in the greater part of Bengal proper, and there is often a great dearth of local craftsmen, which is now being met by the settlement of immigrants from Bihar. The up-country Dhobā, for example, is now to be found in almost all parts of Bengal.

In Orissa, on the other hand, the system, as it obtains in Bihar, is in full force. Whenever a new village is formed, the first care of the settlers is to secure their own staff of village servants, who are induced to come by small grants of land known as *chākrān jagir*, averaging about an acre in area, which they enjoy in addition to the customary remuneration from the

villagers whom they serve. The washerman and barber work for a group of from 30 to 50 families and receive small monthly payments of grain or money. The barber also gets presents of cloth and rice, on the occasion of marriages, varying in value from Re 1 to Rs. 5, while the washerman receives the old cloths in which dead bodies are carried to the pyre, and also the cloths discarded at the *sradh* by the relatives, who are given new ones on that occasion. His wife, moreover, receives small presents from well-to-do people when a child is born. The carpenter and blacksmith receive from 12 seers to 15 seers of paddy per plough and are paid by the job for other work; they, too, enjoy a monopoly of the work in a fixed circle of *jaymans*, who are partitioned amongst their heirs like other property. The Jyotish, or astrologer, has no definite circle, but he usually serves about 100 families, and also acts as the priest of the Chamar and Siyal castes. He attends at all ceremonial observances and shares the offerings with the Bráhmaṇ, taking from a quarter to three-eighths of the total amount given **.

In his report for the Central Provinces Mr. Russell gives many interesting notes on various village industries such as grain parching, dyeing and bangle and kite making and also on the relations which exist between master and servant and the farm servant in particular.

325. The village organization of other parts of India is in full vigour in Bihar and Orissa, but in Bengal proper it is far less developed. Further east, in Assam and Burma, it disappears altogether, and the village functionaries above described are almost unknown. In Assam there are only 14 washermen and 21 barbers per 10,000 of the population and in Burma only 9 and 3, compared with 68 and 77 respectively in India as a whole, and the proportion would be even smaller, if it were not for the towns and the large European population. Oil-pressers, grain parchers, leather-workers, basket-makers, etc., are also comparatively rare in these two Provinces. Cultivators are most numerous in Assam, Bengal, the United Provinces and the Punjab; unskilled labourers in the Central Provinces, Bombay and Madras†; stock breeders in the Central Provinces, Madras, and Bombay; weavers (not in mills) in the Punjab and Central Provinces; carpenters in the Punjab and Burma; fishermen in Burma, Assam and Bengal proper; oil-pressers in the United Provinces and the Central Provinces; barbers in the Punjab and the United Provinces; washermen in Madras, and leather-workers, basket-makers, priests, potters, and grain-dealers in the Punjab.

326. In 1891 the occupations of all persons living in towns, as defined for census purposes, were tabulated separately. The object in view was to ascertain how far the avocations of the urban community differed from those of people living in rural areas, but the results were obscured by the large extent to which the smaller towns partake of the nature of overgrown villages. It was, therefore, thought better, on the present occasion, to take as the basis of the urban statistics the figures for cities, i.e., places with a population of not less than 100,000 persons.‡ The proportional figures for all these places taken together are exhibited in the diagram in the margin of paragraph 320 and in subsidiary table X, which also contains the details for fourteen selected cities of special industrial and commercial importance. We have already seen how, in all cities taken together, agriculture is the means of support of only one-twelfth of the inhabitants, as compared with two-thirds in the general population, but in some of the selected cities the proportion is much lower even than this. In Bombay only 1 person in 130 is thus supported, in Karachi 1 in 40, in Rangoon 1 in 33, and in Calcutta and Madras 1 in 28.

The preparation and supply of material substances, which in India at large support one person in six, in cities afford a livelihood to two in five. In Delhi, Ahmedabad and Amritsar more than half the inhabitants are thus engaged, the proportion is above the general average in Bombay, Madras, Rangoon, Karachi,§ and Howrah, but in Calcutta, Lahore, Allahabad and—strange to observe—Cawnpore, it is below it. In Bombay and Ahmedabad the cotton mills support one-seventh of the population. Cawnpore, Agra, Karachi, and Delhi are also largely indebted for their growing importance to the cotton mills which have sprung into existence in recent years. In Rangoon one-ninth of the

* In the Madras Census Report for 1891 (page 29) Mr. Stuart gives a similar account of the village organization in that Presidency, and shows how it gradually breaks down as the village increases in size and eventually becomes a town.

† Burma is omitted for reasons explained elsewhere.

‡ It has already been explained that in the Provincial Reports a somewhat wider meaning was given to the term 'city'.

§ A peculiarity of the figures for Karachi is the large proportion of "betel-leaf and areca-nut sellers" who form one-nineteenth of the population.

population find a livelihood in the rice mills. Jute mills and jute presses support one-eleventh of the inhabitants of Howrah, and one-nineteenth are maintained by its machinery and engineering workshops. The leather factories of Cawnpore support nearly 3 per cent. of the population.

327. Commerce, including transport and storage, is essentially an urban form of occupation and is returned in cities by 1 person in 8, compared with 1 in 38 in India at large, in Calcutta and Rangoon the proportion rises to 1 in 4, and in Bombay, Madras, Delhi, Lahore, Amritsar, and Howrah it is 1 in 6 or thereabouts, but in Karachi it is only 1 in 12, in Ahmedabad and Cawnpore 1 in 13, and in Allahabad 1 in 27. The variations from the general average for cities in the case of learned and artistic professions (1 in 17) are not as a rule very marked, but the proportion is unusually low in Allahabad (1 in 40) and highest of all in Madras (1 in 12).

Unskilled labour finds most representatives in Howrah (1 in 6), Bombay (1 in 7), and Agra, Cawnpore, and Allahabad (1 in 8). The high proportion in Howrah is due to the entry under this head of 10,000 persons whose means of livelihood was entered merely as "factory work" and who could not therefore be assigned to any definite group, and if these be excluded, only 1 person in 9 depends for his livelihood on "unskilled labour." It is possible that the figures for some of the other cities have been similarly affected by defects in the original return.

Persons "independent of work" (mostly mendicants) are relatively two-and-a-half times as numerous in cities as in the general population; members of the "learned and artistic professions" are three-and-a-half times as numerous, and Government servants nearly four times.

Workers and dependents.

328 The instructions that were laid down as to the distinction between workers and dependents have already been quoted. The rule was that women and children who work at any occupation, not being an amusement or of a purely domestic character, such as cooking, should be entered as actual workers, but amongst the more respectable classes, both of Hindus and Muhammadans, it is not considered proper for a woman to work, and there is thus a tendency to show her as a dependent, even though she may, as a matter of fact, be a worker. It is also very difficult in practice to say at what particular point the line is to be drawn. Is a woman to be regarded as a worker because she husks paddy for domestic consumption, or weaves cloth for the use of her family? Or is a child to be so classed, because he occasionally looks after his father's cattle, or assists in minor agricultural operations such as weeding? Mr. Burn says in his Report for the United Provinces:—

"The principal difficulty found at the present census was the distinction between actual workers and dependents. In a Hindu joint family it is usual to regard the father or eldest brother as head of the family, and in one district I found, luckily before enumeration had commenced, that orders had actually been issued to record the head of the family only as a worker and the rest of the family as dependents. This difficulty was partly due to the use of the word "dependent" which is difficult to translate, and it will, I think, be advisable in future to use simply the terms "worker" and "non-worker", explaining that the former also includes persons with an independent income such as a pension. The case of women and children also gave some difficulty apart from that noted above; both of these, especially in the poorer families, work at home industries and household duties, and the difficulty was to decide whether they should be recorded as workers or dependents. The instructions given laid down that the test was to be whether they did sufficient work to earn their own living, and this was found sufficiently practical to act on."

Mr. Rose is of opinion that "the line between those who are entirely dependent and those who pursue some subsidiary occupation but are virtually dependent on the principal workers has not been strictly drawn" but that nevertheless "the figures represent an approximation to the truth." So far as they go the proportions given in columns 2 and 3 of subsidiary table VI indicate that the proportion of actual workers is considerably below the general average in Kashmir, Mysore, Baluchistan, the Punjab, and Bengal, and a good deal above it in Ajmer, Berar, the Central Provinces, Coorg, and Rajputana. In India at large 47 per cent. of the population have been returned as workers and 53 per cent as dependents. The general proportion for cities is the same as in the general population, but there are marked variations in different parts; in Agra and Madras barely one-third of the inhabitants are shown as workers while in Rangoon, Calcutta, and Bombay three-fifths have been so entered.

The largest number of dependents is found in the case of occupations

CLASS OF OCCUPATION	NUMBER PER CENT	
	Workers	Dependent
A—Government	39	61
B.—Pasture and Agriculture	46	54
C—Personal, Domestic and Sanitary services.	52	48
D—Preparation and Supply of Material substances	48	52
E.—Commerce and Transport	41	59
F—Professions	41	59
G—Unskilled labour not Agricultural	55	45
H—Indefinite and Disreputable	56	44

connected with Government, Commerce and the Professions, which include most of the higher and more remunerative forms of employment, and the smallest amongst the comparatively simple and illpaid avocations falling under the heads "Personal, domestic, and sanitary

services," "Unskilled labour," and "Indefinite." The proportion of workers and dependents in each Order and Sub-order is given in subsidiary table I, and the local distribution under each of the main heads—Agriculture, Industry, Commerce, and Professions will be found in subsidiary table II. The proportions, however, hinge mainly on the extent to which females are employed and the detailed consideration of the subject can best be taken up from this standpoint

329. Of the total number of males only one-third are dependents, but amongst females barely that proportion earn their own living. Only 31 per cent of the persons returned as actual workers are females, *i.e.*, to every 1,000 males who are workers there are only 450 females. The proportion of the latter is less than 10 per cent. in Orders I—Administration, II—Defence, III—Service of Native and Foreign States, X—Vehicles and Vessels, XIII—Metals and Precious Stones, and XIX—Transport and Storage, while it exceeds 80 per cent in the following Sub-orders, *viz.*, 11—Agricultural labourers, 18—Provision of vegetable food, 21—Fuel and forage, 39—Silk, 41—Jute, hemp, etc., 50—Cane, matting and leaves, and 77—Disreputable. The occupations which support more than half a million female workers are noted in the margin.

Occupation	Number of female workers in thousands	Female workers per 1,000 males
Rent-payers	11,008	324
Field-labourers	8,954	1,032
Rent-receivers	6,152	428
General labour	3,841	712
Mendicancy	958	518
Cotton weavers	833	453
Rice-pounders	559	10,068
Cotton-spinners	509	5,639

It will be observed that these eight occupations combined include considerably more than three-quarters of the total number of females who help to support themselves and their families.

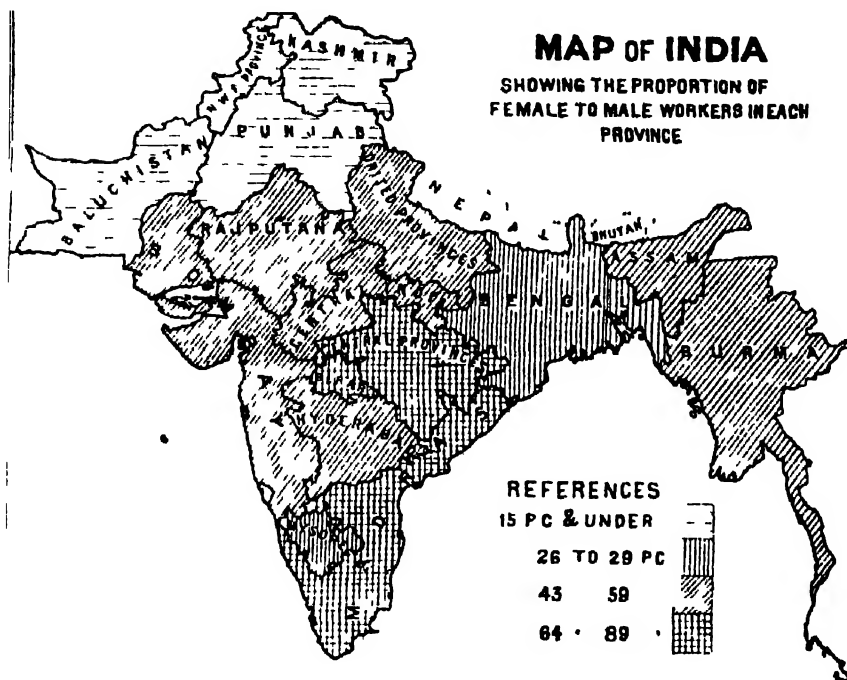
In all but two cases, however, the number is great because the occupation is a common one generally and not because it is in any way a speciality of the weaker sex. It is only in the case of field-labourers, rice-pounders, and cotton spinners that the female workers outnumber the male, and their numerical superiority is very marked only in the case of the two last. Amongst the occupations not shown in the above statement where the figures for females exceed those for males may be mentioned (a) flour-grinders, silk-worm rearers and cocoon gatherers, rope and netmakers, midwives,* tattooers, and prostitutes, where the excess of females is very great and (b) grain parchers, vegetable and fruit sellers, hay, etc. sellers, firewood, etc. sellers, silk carders, spinners and weavers, rope and net sellers, basket and mat makers and sellers, and leaf-plate makers and sellers, where the difference in the sex proportions is comparatively small. Although the females are in a minority, their deficiency is only slight amongst tea-garden coolies, water-carriers, dairy-men, fish-dealers, coal-miners and spangle and sacred-thread makers.

The avocations in which females are engaged may be grouped into three classes—those which are followed by them independently, without reference to the work of their male relatives, such as midwifery, tattooing, silk-worm rearing, domestic service, flour grinding and the like; those which are supplementary to the husband's occupation, such as cotton-spinning, carried on by the wives of weavers, and the selling of fruit, vegetables, milk and fish by the

* A few males have been returned as midwives. In Bengal the persons so entered merely sever the umbilical cord and do not assist in the actual delivery.

wives of fruit and vegetable growers, cow-keepers and fishermen; and lastly those in which both sexes work together, such as basket-weaving, work on tea gardens and coal mines and as field-labourers or *jhum* cultivators. The occupations which females follow, either independently or as a supplement to some kindred employment of their male relatives, are generally distinguished by two characteristics, their simplicity and the small amount of physical labour which they involve.

Local and functional distribution of female workers



330. The proportion of female workers is lowest in the north-west of India, in the Punjab and Kashmir, and it is also much below the average in Mysore and Bengal, while it is exceptionally high in Berar, the Central Provinces, Madras and Coorg; in the rest of India the variations are comparatively slight, and range only from 43 per hundred males in the United Provinces to 59 in Rajputana.

The local proportions in respect of some of the main occupations are given in subsidiary table VI. In the case of rent-receivers the female workers are

more than half as numerous as the males only in Coorg, the Central Provinces, Bombay, Madras, Assam, Burma and Ajmer; the areas where they exceed this proportion in respect of rent-payers are the same, except that in this case Rajputana takes the place of Assam. Female farm servants are numerous only in Travancore, the Central India Agency and Hyderabad, but the field labourers of this sex often outnumber those who are males, and the excess is very marked in Assam, Berar, the Central Provinces, Madras, Central India, and Rajputana, especially in the first mentioned province, where there is no class of landless labourers and the only persons usually obtainable for work in the fields are poor widows and other females who have no male relatives to depend on. Women are most commonly employed as indoor servants in Madras, Baroda, Cochin and Travancore, and as water-carriers in Bengal, the Central Provinces, Baroda and Madras.

331. It might be supposed that the people must be most prosperous where the proportion of drones is smallest, *i.e.*, where there are most female workers. Or, conversely, it might be imagined that where the people are poor, there they can least afford to do without assistance from the female members of their families. As a matter of fact, however, there is no apparent connection between the material condition of the people and the extent to which women share in the labours of the men.* The most prosperous tracts in India are perhaps to be found in Burma and East Bengal, but in the former the proportion of female workers is much above the average, while in the latter it is much below it; the people of Madras are probably quite as well-off as those of the Punjab, but in the former province female workers are four times as numerous as in the latter. Nor does the proportion vary with the pressure of the population on the soil. Bengal, excluding Chota Nagpur, is more densely inhabited than the United Provinces, but it has a much smaller proportion of female workers; and the Central

* The employment of women may add to the economic efficiency of the community at large, but it does not necessarily conduce to the well-being of the labouring classes. In a certain part of England it has been stated that the chance on the additional earnings of the women engaged in glove making has caused the firm labourers to accept a rate of wages below that which affords the normal human subsistence (Journal of the Statistical Society, 1903, Part II, page 354.)

Provinces, though more sparsely populated than Bombay, contains many more females who help to swell the family income. The main explanation of the local variations is to be found in the state of feeling regarding the seclusion of women. Where the prejudice against their appearing in public is strong, as in the Punjab, where Muhammadans and Rājputs of all classes would suffer greatly in social estimation if they allowed their women to help in the fields, female workers are found only amongst the lower sections of the community, but where such scruples are weak or non-existent, as in Burma and amongst the hill tribes of Assam, Chota Nagpur and the Central Provinces, the number returned is comparatively large. It must be borne in mind, however, that the real differences in this respect are less than the figures would indicate, and that women, who would be entered as workers in the tracts where there are few scruples regarding the *parda*, would be shown as dependents in those where the prejudices on the subject are strong.

In cities the number of female workers varies according to the class of labour required. Where cotton mills are numerous, as at Ahmedabad, the proportion is high, but it is very low in commercial centres like Rangoon and Karachi.

332. It would be interesting if the table of occupations could be utilised to throw light on the extent to which the introduction of European capital and methods of work has influenced the functional distribution of the people. It is, however, not always possible to draw a distinction between imported, if one may use the expression, and indigenous occupations. The group "bankers, money lenders, etc.," for example, includes both the European banker and the village usurer, and "general merchants" include both the wholesale traders of the Presidency towns and the indigenous dealers in general merchandise of rural areas. The labourers engaged in the construction of railway embankments and canals cannot be distinguished in the returns from those working on roads. The advent of the British has greatly augmented the number of persons employed in the direct administration of the country and has also added enormously to the staff of teachers, engineers, medical practitioners, and the like; but of these, too, no reliable count can be taken. There are, however, certain occupations which are wholly exotic, of which the principal ones are noted in the margin, and these are shown by the returns to be the means of support of 1½ million persons or between 5 and 6 persons per mille. In most cases, moreover, industries conducted in factories have been distinguished in the course of compilation from the corresponding hand industries. The return is not complete, some factory industries, such as woollen mills, have not been differentiated, while even where they have been, the entries in the

Railways (open line)	503,993
Post Office	133,933
Telegraphs	20,490
Tea gardens	874,975
Coffee plantations	106,154
Cinchona plantations	1,007
Indigo factories	15,783
TOTAL	1,656,345

schedules were often not sufficiently precise, and factory employées were in consequence relegated to the group provided for hand workers, or to some more general head, so that, as will be seen from subsidiary table XI, the census figures often fall far short of those collected in connection with the Return of Large Industries published by the Director-General of Statistics. So far as they go, however, these figures show that, in addition to the persons included in the above statement, more than 1½ million are employed in factories, coal mines and other undertakings founded with European capital or conducted according to European methods. The total thus exceeds 3 millions, or 1 per cent of the total population. This may not seem very much, but it is at least a beginning, and there are many indications that India is entering on a period of great industrial activity. The local production of coal, coupled with the extension of railway communication, has removed one of the chief obstacles to progress and, in Bombay at least, native capital is beginning to flow more freely towards industrial enterprise. The main difficulty in this connection is that the ordinary native of this country does not yet put much trust in joint stock undertakings and the small capitalist still fights shy of investing his savings in companies.

Of all the industrial undertakings, properly so called, the cotton mills are

by far the most important. According to the census 347,728 persons are supported by employment in these mills, of whom 185,875 are actual workers. Half the total number are in the Bombay Presidency, and the rest are distributed over various parts of the country, the largest number in any single province being in Madras, where it amounts to 17,486. Jute mills are returned as supporting 130,664 persons, practically all in Bengal, and collieries 100,329, more than four-fifths of whom are found in the same province. According to the Return of Large Industries, the number of cotton mills has risen during the decade from 127 to 190 and the average number of employes from 118 to 156 thousand. There were 35 jute mills at work in 1900, compared with only 25 ten years earlier, and the average number of hands was 110, against less than 65, thousand. The persons employed in coal mines were returned at 35,000 in 1891 and at 95,000 in 1901. For further details reference may be made to subsidiary table XI.

The Agricultural Population.

General
results

333 Of the total population of India about two-thirds returned some form of agriculture as their principal means of subsistence. Order V—Agriculture includes four sub-orders:—

- (a) Landlords and tenants, under which head 52 per cent of the population were enumerated;
- (b) Agricultural labour, which includes 12 per cent.;
- (c) Growers of special products, who constitute about 1 per cent., and
- (d) Agricultural training and supervision and forests which account for about one-third per cent

The first of these sub-orders is again divided into two groups, *viz.*, (i) rent receivers and (ii) rent-payers, which contain respectively 16 and 36 per cent. of the total population. In the provincial series of Reports of the Census Superintendents were given the option of further subdividing these groups, and in Madras, Mr Francis has distinguished between cultivating and non-cultivating landowners and cultivating and non-cultivating tenants. In the United Provinces Mr. Burn has followed a different system, and has broken up the group of rent-payers into three parts according to their legal status, *viz.*, tenants with some rights of occupancy, tenants with no rights of occupancy, and sub-tenants. Mr Rose in the Punjab combines both these lines of cleavage and his sub-groups include (i) owners, (a) cultivating, (b) non-cultivating; (ii) mortgagees, (a) cultivating, (b) non-cultivating; (iii) occupancy tenants, (a) cultivating, (b) non-cultivating; and (iv) tenants-at-will. Occupancy tenants who sub-let have been added to rent-receivers, whereas in the United Provinces all tenants have been classed as rent-payers. In the Central Provinces the different classes of tenants have been distinguished, but "the figures are not accurate because 300,815 persons were simply shown as tenants without their class being recorded." In Bombay—

"An attempt was made to arrive at some more detailed classification of the population living on the land, with a view to showing the number both occupying and cultivating land, those occupying but not cultivating, and those cultivating but not occupying, the term 'occupant' referring to persons paying assessment to Government, for the land. It was hoped by this means to obtain some statistics of interest bearing on the extent to which the cultivating population held direct from Government the land from which they gained their livelihood. But the entries in the schedules were so carelessly made that the statistics could not be compiled for a sufficient number of cases to be of any value, and the attempt was therefore abandoned."

In Bengal no subdivision of the two main groups was made because—

"any attempt to do so would have been misleading, owing to the impossibility of securing entries in the schedules sufficiently clear to permit of the necessary differentiation. The terms used in describing the different kinds of interest in land are so numerous, and their meaning in different localities varies so greatly, that any attempt to particularise would have been foredoomed to failure. I consulted district officers on the subject, but the general opinion was strongly against any attempt to complicate matters by the detailed instructions which would have been necessary, especially as it would have been quite impossible, with the agency available, to ensure their being carried out."

In Burma also the main heads were left untouched, but even so, the figures are incomplete, because persons returned as cultivators (unspecified)

were classed, not as rent-payers but as field labourers.* Mr. Lewis says :—

"The term 'Rent-payers' would properly cover the very large class of State land workers in Upper Burma who pay rent for their holdings direct to Government, and if it had been decided to require all agriculturists in Upper Burma to state whether the land they worked was *bobabaing* or State it might have been possible to secure fuller returns for occupation number 36 than were actually obtained. An instruction of this nature would, however, have been directly opposed to the policy of dissociating the census as far possible in the minds of the people from revenue collection and it has thus been found necessary to sacrifice a certain amount of detail to the susceptibilities of the enumerated. It is, moreover, a question whether in a country like Burma the duty of differentiating nicely between the various classes of agriculturists is one which need be thrown upon the census department."

The above quotations have been given as they clearly explain why in the general scheme no attempt has been made to subdivide the two large groups of rent-receivers and rent-payers, which contain between them more than half the total population. Wide as they are, we have seen that in Burma at least they do not cover the ground that they were intended to, and in other provinces also there has doubtless been a good deal of confusion, though on a smaller scale. Mr. Francis points out that—

"The small agriculturist is frequently a cultivating and non-cultivating landowner, a tenant, a farm-servant and a field-labourer all rolled into one, owning land which he partly cultivates and partly lets out for rent, hiring other land from some one else, and eking out his earnings by working on the land of others in between whiles."

The expressions "rent-receivers" and "rent-payers," moreover, do not cover the same ground as the terms "land-occupants" and "tenants" used at the previous census, and there is reason to believe that they have not always been uniformly interpreted. The value of the distinctions which have been made depends largely on local considerations and in some provinces the details may be more accurate than in others.† But in dealing with the aggregate for India as a whole it would be misleading to lay stress on the figures for groups and the only safe method is to deal with the whole sub-order collectively.

334. Taking the two groups together, and adding to them the growers of special products, who also fall properly within the same category, we find that persons with an interest in land are relatively most numerous in Assam, where they constitute 72 per cent of the population. This backward province contains an exceptionally small urban population, has very few village servants or artisans, and no class of wealthy landlords with their numerous hangers on and attendants. Bengal comes next to Assam with 64 per cent; and then the United Provinces and the Punjab with 56 and 55 per cent, Madras with 49, and the Central Provinces with 48, per cent. The proportion in Burma stands at only 24 per cent., but this is due to the circumstance, already alluded to, that 'cultivators unspecified' were there classed as agricultural labourers. Of the main provinces other than Burma, the smallest proportion of persons possessing an interest in land is found in Bombay (43 per cent).

The above figures represent the provincial averages but within the limits of the larger provinces there are great local variations. In the Punjab, for example, the proportion is far higher in the Himalayan districts than in Amritsar, Lahore, Multan, Delhi, and Jhang; and in the United Provinces in Almora, Garhwal, and the Tehri State than in the Western Plain. In Madras, Mr. Francis points out that the districts with a low average are not those which are infertile but those which contain a comparatively large industrial population, and his observation applies to all parts of India, with the rider that the proportion depends also on the extent to which the primitive organization of labour which characterizes the typical Indian village is in vogue. Where each village is supplied with a complete outfit of village servants and artisans the proportion of cultivators is lower than where, as in Assam, each family does its own washing, weaving, basket-making and the like, and the professional barber, washerman, scavenger, carpenter, etc., are non-existent. In some provinces, moreover, the holdings are larger than in others, and many of the persons engaged in cultivation are merely hired labourers.

* In Salween and Amherst no rent payers at all are entered in the return and in eight other Districts their total number is less than 10.

† In some cases marked variations are noticed in comparison with 1891. In Cochin, for example, cultivating tenants have increased from 38 to 182 thousand, in Madras cultivating land-owners have increased from 8½ to 18½ million, while non-cultivating land-owners have fallen from nearly three, to less than four-fifths of a million, and in Assam cultivating tenants number 1½, compared with little more than half a million. In such cases there must clearly be some error either in 1891 or at the present census, or at least some radical change in the interpretation assigned to the entries in the schedules.

Agricultural
Labour

335 The next sub-order, "Agricultural Labour" is divided into three groups, *viz*, farm-servants, field-labourers, and *jhum* or *laungya* cultivators. The last mentioned group, which belongs perhaps more properly to the previous sub-order, is admittedly not complete, and many of the wild tribes who live by this wasteful form of shifting cultivation have been returned as ordinary cultivators. There has been much confusion between farm-servants and field-labourers, and also between the two combined and the head 'general labourers' which finds a place in Order XXII. It has already been explained that most unskilled labourers depend mainly on field work for their subsistence, but large numbers have been relegated to the more indefinite head, either because of the vagueness of the entries in the schedules, or because at the time of the census, when there was in many parts less field work than usual, they were employed temporarily on some other kind of labour. Excluding Burma, the largest number of agricultural labourers in any of the main provinces is returned in the Central Provinces, Madras and Bombay, and by far the smallest number in Assam and the Punjab.

Occupations
combined
with
Agriculture

336 We have hitherto been dealing with the question solely with reference to the principal occupations entered in the schedules. Some of the persons thus classed as agriculturists follow other pursuits as a secondary means of livelihood but, contrariwise, there are many who have been classed under some non-agricultural head, because that has been returned as their main occupation, who are also partially dependent on the land. In other words the return of the agricultural population has, on the one hand, been swollen by the inclusion of persons whose means of subsistence, though mainly, are not wholly, agrarian, while on the other, it has been reduced by the total exclusion of those who practise agriculture as an ancillary form of employment.

(1) Where
agriculture
is the sub-
sidiary occu-
pation

337 We will commence with the latter, whose number, in the case of actual workers, has been tabulated in all provinces and states, and is shown against each non-agricultural head of occupation in Table XV*. We may assume that the proportion of persons with dual occupations which is found to exist amongst workers, applies equally to the whole population, including dependents, and if so, in India as a whole, in addition to the 651 persons per mille who are wholly or mainly dependent on agriculture, there are also 24 per mille who depend on it as a secondary means of subsistence†. The proportion of such persons is largest in Hyderabad, Rajputana, and the United Provinces, where it ranges from 55 to 36 per mille, and it is also above the average in Ajmer, Central India, and Mysore, it is slightly below it in Bengal, Bombay, Madras, and the Punjab, and considerably so in Assam, Berar, Burma, the Central Provinces, Coorg, Baroda, Cochin, Travancore, and Kashmir. The proportion of persons who are partially agriculturists is highest in the case of occupations falling under Class A—Government, where 1 person in 8 depends on some agricultural pursuit as a subsidiary means of support; in Mysore half the persons in Order I—Administration, have been shown as partially agriculturists, in Coorg one-third and in Madras one-fourth. Of those engaged in 'Personal, domestic and sanitary services,' 77 per mille have returned some form of agriculture as a subsidiary employment, and in the United Provinces, Madras, and Mysore the proportion ranges from 108 to 113 per mille. It would be tedious to recite the proportions in further detail, as they are all available in subsidiary table VII, but attention may be drawn to the close connection with the land indicated by the figures for blacksmiths and other workers in metal, and also for potters and their congeners in the United Provinces, Mysore and Bengal; and for pleaders and priests in Madras, the United Provinces, Bengal and several smaller provinces and states.

* It should be explained that these figures refer only to persons whose agricultural avocations were entered in column 10 of the schedules, which refers to subsidiary occupations. The Census dealt only with two occupations, and persons with three or more, whose income from agriculture was so small as not to occupy the first or second place, were left out of account. This however has probably not had any appreciable effect on the statistics. A further source of error is possibly to be found in the defective return of subsidiary occupations. In all cases the main occupation was entered, but it is very doubtful if the enumerators were equally particular about ascertaining and recording subsidiary means of livelihood. The omissions, however, were probably not numerous in the case of subsidiary occupations connected with agriculture.

† This ratio refers, as stated, to the total population. If we exclude those who are mainly agriculturists, and base the calculation on the number whose principal occupation is non-agricultural, the proportion rises to 66 per mille.

338 There is no place in the Imperial tables for the entry of the subsidiary occupations of agriculturists, and Bengal is the only province where a full record is available of the number of persons whose main occupation is of an agricultural nature but who depend partly on some other means of subsistence*. In that Province 1,684,650 persons out of 20,521,309 actual workers in Sub-orders 10 and 11 mentioned some non-agricultural pursuit as a subsidiary means of subsistence, this gives a proportion of 53 per mille on the total number of actual workers in the province, compared with 21 per mille who practised some other occupation in conjunction with agriculture but returned the latter as the subsidiary one. In other words, out of every seven persons living partly by agriculture and partly by some other avocation, 5 returned the former, and 2 the latter, as their principal means of subsistence. The disproportion in all probability represents a state of feeling rather than a state of fact, and the agricultural head was doubtless in many cases given precedence, not because it was really the more lucrative, but because it was considered the more respectable. In the

(n) Where agriculture is the main occupation

Subsidiary occupations	Number per 10,000
(a) OF RENT-RECEIVERS	
Money-lenders	217
Priests	166
General Merchants	115
Clerks, not Government	79
(b) OF RENT-PAYERS	
General labourers	258
Shop-keepers	69
Weavers	35
Fishermen	32
Cattle-breeders	31
Barbers	24
Oil-pressers	21
Potters	18
Washermen	18

NOTE.—The proportions refer to the total number of rent receivers and rent payers respectively and not merely to the number with dual occupations.

case of rent-receivers the most common non-agricultural occupations are money-lending, the priesthood, general trade, grain dealing, and private clerical service, and in the case of cultivators, general labour, shopkeeping, and weaving; a considerable number of both classes were by subsidiary occupation village servants and artisans such as barbers, oil-pressers, potters, and washermen.

In the Punjab only certain selected subsidiary occupations of rent-receivers and rent-payers were tabulated, of them the most common are (a) for rent receivers—village servants 109, traders 63, artisans 60, and Government officials 44 per 10,000 and (b) for rent-payers—artisans 109, menials 64, traders 37, general

labourers 36, and village servants 34 per 10,000. In the United Provinces out of every 10,000 rent-payers 511 are also day labourers, 72 are artisans and 16 are money-lenders. of the same number of rent-receivers, 61 are money-lenders, 54 day labourers, 17 artisans, and 9 pensioners.

339 The proportion of persons shown in Order V—Agriculture, at the present census is 651 per mille compared with only 599 in 1891. If the system of classification had remained unchanged, the inference would be that this indicates a greater dependence on the land due to the abandonment of weaving and other indigenous industries. We have seen, however, that there has been an important change of system, and that on the present occasion each person has been entered according to the principal occupation returned by him, whereas in 1891 all dual occupations were tabulated under the non-agricultural head. The proportion for 1891 refers to the number of persons solely dependent on agriculture, while that for the present census includes also those with other occupations who named the agricultural one as their chief means of support. A separate return was prepared in 1891 of the persons partly dependent on agriculture who were thus excluded from the agricultural head in the general occupation table and if these be added, the proportion wholly or partly dependent on agriculture in 1891 rises to 645. Similarly on the present occasion, if we add to those returned as chiefly dependent on agriculture the number who follow it as a subsidiary occupation, the proportion is 675 per mille. The difference, viz., 30 per mille, is still considerable, but it can be accounted for in more ways than one. In the first place there is the uncertainty, already alluded to, as to how the ordinary coolie should be dealt with. In the Central Provinces, where the number of persons entered under the head "General Labour" has fallen by more than half while that of "agricultural labour" shows a corresponding rise, Mr. Russell explains the result by saying that "at this census persons who returned

Comparison with 1891, (a) in number wholly or partly agricultural

* In the United Provinces, the Punjab, and one or two other provinces, dual occupations (some of which were, while others were not, connected with agriculture) were tabulated for certain selected groups, but the total number of persons, mainly agriculturists, who also practised some non agricultural occupation, was not ascertained.

the term "labour" from rural areas were classified as field-labourers, "as it was considered that they were more dependent on agriculture than on any other single means of subsistence." In Bengal we have already seen that in comparison with 1891 about 3 million labourers have been transferred from the non-agricultural to the agricultural head; here too the cause is a change in the method of classification, coupled with the more successful elimination of the word "coolie" from the enumeration schedules, rather than an alteration in the actual conditions of the Province. There has been a similar transfer of about 2 million persons from the former to the latter head in Madras. Sometimes there has been a move in the other direction, and in the Punjab a decrease of half a million has taken place in the number of field-labourers coupled with a still larger increase in that of sweepers, many of whom are supported mainly by agrestic employment, and of general labourers. The net result, however, for India as a whole shows a large shifting from the non-agricultural to the agricultural head. Excluding Burma, where genuine cultivators have been thus classed, the number of farm-servants and field-labourers combined has risen from 17,990,575 to 29,669,315 or by 11,678,740, while that of general labourers has fallen from 23,592,649 to 16,519,442 or by 7,043,207. It may be assumed that the latter number at least, or 25 per mille, has been added to the agricultural population merely by changes in the classification of landless labourers. There have been other local changes which have tended in the same direction, *e.g.*, in Bombay, where the increase in the population supported by agriculture is due mainly to the rectification of an error of classification in 1891, when some 390,000 cultivators in Sind were classed as industrial merely because they disposed of their own produce.

(b) in number solely agricultural

340 There are, moreover, reasons for believing that in some provinces the supplementary return prepared in 1891 of persons partly dependent on agriculture was not very complete. As already explained that return purports to include all cases where agriculture is practised in conjunction with some other means of livelihood, whether as a principal or as a subsidiary occupation. We have seen that in Bengal at the present census, in the case of occupations combined with agriculture, the latter has been returned as the main occupation by 5 persons to every 2 who have named it as the subsidiary one. The proportion who were "partially agriculturists," as the term was understood in 1891, should, therefore greatly exceed the corresponding proportion in 1901, which refers only to those whose agricultural pursuit is a subsidiary one, and it does so in Assam (88 to 13), Bengal (73 to 21), the Central Provinces (23 to 6), the United Provinces (80 to 36) and Baroda (22 to 9). In some provinces, however, the excess is comparatively small, *e.g.*, in Bombay (33 to 21), Madras (26 to 19), and the Punjab (31 to 22), while in others the proportion was actually less in 1891 than at the present census, *e.g.*, in Bihar (8 to 12), Burma (1 to 10), Hyderabad (29 to 55) and Mysore (7 to 33). It follows that in 1891 the number of persons who were partially agriculturists must have been under-stated in the returns for India as a whole. It is impossible to say to what extent this was the case, and the only way to eliminate the error would be by taking as the basis of comparison, the number of persons at each enumeration who depended solely on agriculture for their support. Unfortunately this information is available at the present census only for the Province of Bengal. If it be assumed that the proportion which the number of persons returned in Bengal under the agricultural head, who are partially non-agriculturists, bears to that of those who follow some form of agriculture as a subsidiary occupation is of general application, the 24 persons per mille, in India as a whole, who returned agriculture as a subsidiary occupation, would connote about 60 per mille who returned it as their chief means of support but who were also partially non-agriculturists. Deducting this figure from the 651 per mille who are wholly or chiefly agriculturists we get 591 per mille as the proportion of persons who are solely dependent on agriculture, compared with 599 per mille in 1891.* There would thus seem to have been a slight decrease in the proportion of persons solely dependent on agriculture, in spite of the extensive transfers to the agricultural head owing to the vagaries of classification already alluded to. It is not pretended that the above calculation is absolutely, or even approximately, correct, for although Bengal contains a quarter

* For provincial details and a further explanation of the method by which the figures have been arrived at, subsidiary table IX may be referred to.

of the total population of India, there may be many reasons why the proportion which obtains there between the number of persons practising agriculture (a) as a principal and (b) as a subsidiary means of subsistence should differ greatly from that elsewhere, but it is of value as showing that no deduction can be made from the comparative results of the two enumerations in support of the contention that the people of India are becoming more and more dependent on the soil as a means of livelihood.

Non-Agricultural Occupations.

341. The above examination of the return, so far as it relates to agricultural avocations, has been carried into some detail, partly because agriculture, which is the means of subsistence of two-thirds of the inhabitants of India, is by far the most important item in the classified scheme of occupations, and partly because it was necessary to show that the growing dependence on the land, which a superficial comparison of the results of the present census with those of its predecessor would seem to suggest, has no real existence in fact. The subject of large industries has already been dealt with; the other occupations will be discussed more briefly and attention will be drawn only to points of special interest. Unless the contrary is specially stated, the figures quoted should be understood to refer to the total population supported by an occupation and not merely to the number of actual workers. The increase of nearly 20,000,000 persons in Order V—Agriculture, which has been explained at length above, has its corollary in a corresponding decrease under other heads, but the extent to which they have been affected varies in each case according to the degree to which the occupation in question is pursued in conjunction with agriculture. Where the combination is a common one, the decrease under the non-agricultural head is considerable, and *vice versa*. In a few cases of special importance where some data for forming an opinion are available, an attempt will be made to gauge and allow for changes due to the alteration of system, but this will not be possible generally, and it will be necessary therefore to remember that where there is only a slight falling-off in the figures for the present census, they probably indicate an increase in the actual numbers, and that any gain which may be apparent from the figures is almost certainly less than that which has really taken place.

342. Employment under Government is the means of support of more than 5½ million persons or 19 per 1,000 of the population. Of these 13 per mille are shown in Order I—Administration, 1 per mille in Order II—Defence, and 5 per mille in Order III—Service of Native and Foreign States. Order I is again subdivided into (a) the Civil Service of the State, which is the means of subsistence of 4 per mille, and includes the various officers of Government engaged in the direct administration of the country (but not Engineers, or officers of the postal, telegraph, medical, education, and other similar departments,) and also clerks, inspectors, constables, messengers and other subordinates; (b) Service of local and municipal bodies which supports 1 per mille; and

Group	NUMBER ACCORDING TO	
	Cen	Returns of the Military Department
11 Officers	5,989	3,571
12 Non-commissioned officers and privates	127,980	187,114
16 Military service unspecified	80,369	
TOTAL	164,338	190,685

NOTE.—The figures in column 3 are exclusive of 20,556 persons in the reserve and also of 696 officers and 28,205 men absent on Command, chiefly in South Africa and China.

(c) village service, under which category 8 per mille have been returned, including village headmen and accountants, watchmen and other village servants; the last mentioned head alone supplies more than 1½ million persons, or more than two-thirds of the total number in the Sub-order. About two-fifths of a million are shown as supported by Order II—Defence, of whom 238,000 are actual workers. The number who are shown as belonging to the Army proper is compared in the margin with the returns of the Military Department. The discre-

pancy in the case of 'Officers' is due mainly to the fact that native officers, who number 2,793, have been classed in the army returns with 'Non-commissioned officers and privates,' whereas at the census they were probably included under the first mentioned head. The deficiency in the census figures for 'Non-commissioned

officers and privates,' even when 'Military service, unspecified' is added, seems due to various causes. Some persons, such as native drivers in the Royal Artillery, who ought to have been classed as privates, may have been wrongly relegated to the heads 'Followers' and 'Military administrative establishments', which include between them some 52,000 workers; men absent on leave may not always have returned themselves as mainly dependent on their service in the army; while those employed in arsenals and gun factories have been grouped under other heads in the classified scheme of occupations.

As compared with 1891 there has been a decrease of 17 per cent. in the number of persons dependent on Government employment, but the diminution is not more than can be accounted for by the entry under Order V of village servants and others who returned agriculture as their chief means of support but who at the previous census were in all cases classified according to their non-agricultural means of subsistence.* Within the Class, the fluctuations are due mainly to changes in the system of classifying persons in Native States who were returned as in the service of the State within the limits of which they were enumerated.

Class B—
Pasture and
Agriculture.
Order IV—
Pasture

343. Class B—Pasture and Agriculture is shown as the principal means of subsistence of 665 persons per mille of whom 13 per mille are in Order IV—Provision and Care of Animals and 652 in Order V—Agriculture. Of the total number in Order IV, three-fifths are herdsmen, and the majority of these are doubtless children employed to look after the village cattle. There has probably been some confusion between this head and cattle dealers and breeders, who appear in the same Order, and milkmen and butter dealers, who are classed in Order VII. The sheep and goat breeders, who number about a third of a million, generally combine this occupation with the weaving of blankets and woollen cloth, under which head about a quarter of a million persons are grouped in Order XII. The total number of persons supported by occupations falling under Order IV is greater by 9 per cent. than in 1891, but two-thirds of the increase is due to the inflation of the figures for shepherds and goatherds at the expense of those for blanket-weavers, etc., which are smaller by nearly a quarter of a million than the corresponding entry of the previous census. The former group has also gained by a transfer of a quarter of a million persons from the group "sheep breeders, etc.," and herdsmen have similarly been augmented by three hundred thousand persons shown as cattle breeders in 1891, but as these groups lie within the same Sub-order, such changes do not affect a comparison of the main heads of the occupation scheme.

Order V—
Agriculture

344. Order V—Agriculture has already been dealt with as a whole, but there are a few items in Sub-order 12—Growers of special products, which are of interest. The persons employed on tea gardens with their families number seven-eighths of a million. Of these five-sevenths were enumerated in Assam, where the tea industry supports a tenth of the total population of the province,† and all but a few thousand of the remainder in Bengal. About 100,000 persons are employed in the coffee plantations of Southern India. There is an increase during the decade of over 80 per cent. in the number of persons supported by the tea and coffee industries combined, but this is due in part to an error in the Bengal return for 1891. Betel-vine and areca-palm growers show an increase of 90,000 as compared with the last census, but there has been an equivalent reduction in the number of sellers of these commodities who are classed in Order VII, Sub-order 19. The distinction between the two occupations does not always exist in fact, and the same vernacular term is often applied to both; about six-sevenths of a million persons are supported by the two taken together. According to the present census there are less than three-fifths of a million "Fruit and vegetable growers," or half a million fewer than in 1891, but there is a corresponding increase in the "Miscellaneous" group of the same Sub-order, and also of 139,000 in that of "Vegetable and fruitsellers" in Sub-order 18. These changes are clearly a matter of classification. So far as the returns of the present census can be relied on, the total number of persons supported by the growing and selling of fruit and vegetables is not far short of a million and-a-half. The agents and managers of landed estates with their clerks, bailiffs, and other subordinates aggregate about 900,000, or much the same as at the previous census, but

* See ante, paragraph 308

† In Assam the tea garden coolies number 623,417 and the total population of tea gardens is 657,331.

the distinction between the two groups has been more accurately drawn on the present occasion, and the superior staff now represent only one-eighth of the total against three-fifths in 1891.

345 The number of persons dependent on personal, domestic and sanitary services is about 10½ millions, or 36 per mille, against 11½ millions in 1891; of those now returned more than 9 millions are in Sub-order 14—Personal and domestic services, and a million and a half in Sub-order 16—Sanitation, which consists almost exclusively of sweepers and scavengers. In the Class as a whole there has been a decline of about half a million in comparison with 1891, a decrease of about 900,000 in Sub-order 14 being partly counterbalanced by an increase of 400,000 in Sub-order 16. The change in the latter head is due largely to the figures for the Punjab, where Chuhras have been more freely returned as sweepers than in 1891. At the present census more than half the total Sweeper population of India is returned in the Punjab; the number is here twice as great as in the United Provinces and more than ten times that reported in Bengal.

About a quarter of the loss in Sub-order 14 is due to the entry in another part of the scheme of the persons who in Bengal returned their occupation as 'service' without any further specification; the vernacular word employed in the schedules (*chākari*) connotes clerical employment more frequently than domestic service, but it was classed under the latter head in 1891. The rest of the difference is explained by the entry of many village-servants under some agricultural head; such persons are frequently remunerated, in part at least, by a grant of land, and where they returned their main employment as cultivation they were entered accordingly at the present census, whereas in 1891 they were classed in the main occupation table according to their non-agricultural means of support. There are now 2½ million persons returned as barbers or about a quarter of a million less than in 1891. The Bengal return of the non-agrestic pursuits of persons mainly dependent on agriculture shows that 24 per 10,000 rent-payers and 12 per 10,000 farm-servants and field-labourers were also barbers, and if we apply these proportions to the figures for the whole of India, we get 297,000 as the number of persons who returned some form of agriculture as their chief means of subsistence, but who in 1891 would have been classed as barbers. With this addition the apparent decrease of 10 per cent. becomes converted into a small increase of 2 per cent. By a similar calculation the number of washermen (now about two millions), instead of declining by 2 per cent., would appear to have risen by nearly 9 per cent. It is unnecessary to consider the other items in detail, but it may be noticed in passing that indoor servants number about 2 millions, water-carriers more than a million, and cooks more than a third of a million.

346. Next to Class B, Class D is numerically the most important in the whole occupation scheme and includes the means of livelihood of 45½ million persons or 155 per thousand of the total population. It comprises no less than

Order.	Persons supported in thousands
VII.—Food, Drink and Stimulants	16,759
VIII.—Light, Firing and Forage	1,461
IX.—Buildings	1,580
X.—Vehicles and vessels	132
XI.—Supplementary requirements	1,232
XII.—Textile fabrics and Dress	11,214
XIII.—Metals and precious stones	3,711
XIV.—Glass, Earthen and stone ware	2,148
XV.—Wood, Cane, Leaves, etc.	3,790
XVI.—Drugs, Gums, Dyes, etc.	456
XVII.—Leather, etc.	3,242

cleven Orders, the largest being "VII—Food, Drink and Stimulants" and "XII—Textile fabrics and Dress."

Order VII contains three Sub-orders, *viz.*, 17—Provision of animal food, 18—Provision of vegetable food, and 19—Drink, stimulants and condiments. The provision of animal food supports nearly four million persons, or about 100,000 less than in 1891. The main items are the two groups devoted to fishermen and fish-dealers, which between them support 2½ million persons. The total number is

slightly less than in 1891, a large decrease in the former group being nearly cancelled by a corresponding gain in the latter. Milkmen and dairymen number 925,000 and *ghi* preparers and sellers 88,000 more. These two groups combined have about the same strength as in 1891, but there has been a transfer of about 47,000 persons from the latter to the former. The total number of butchers and slaughterers in the whole of India only slightly exceeds a

Class C—
Personal
services

Class D—
Preparation
and supply
of Material
Substances
Order VII—
Food, Drink
and Stimu-
lants

third of a million, a convincing testimony to the small extent to which meat enters into the diet of the people, even in the case of those who are not precluded from eating it by religious scruples.

347. Of the occupations included in Sub-order 18, which are the means of subsistence of more than $8\frac{3}{4}$ million persons, the most important are those noted in

Occupation	Number supported in thousands
Grain and pulse dealers	2,264
Oil pressers (including mills)	1,809
Rice pounders	901
Vegetable and fruit sellers	862
Grain parchers	762
Flour grinders (including mills)	628
Sweetmeat makers and sellers	604
Makers and sellers of sugar, molasses, etc	217

the margin. The grain dealer is found in almost every village, and is often a money lender as well, especially in Bombay and Northern India, where he is most frequently met with, and where his insidious ways with the agricultural community have recently led to special legislation in the interests of the latter. The number of persons shown under this head is

much smaller than in 1891 owing to the fact, already adverted to, that on that occasion cultivators in Sind who disposed of their own produce were classed as grain-dealers.* The number of oil pressers is declining in all the larger provinces except Burma and the Punjab. Kerosine is replacing vegetable oils as an illuminant, and the Telis are in consequence gradually taking to other pursuits; in Bengal many of them become shop-keepers, while in the United Provinces they often seek a livelihood by the parching of grain. The heavy imports of sugar from abroad have reduced the number of persons who in this country subsist by its manufacture and the other connected industries.

Two-fifths of the persons in Sub-order 19, which supports in all nearly four million persons, are "Grocers and general condiment dealers;" owing chiefly to wholesale changes of classification in the Punjab and Rajputana, the number of such persons is less by 94 per cent than it was in 1891.† Toddy drawers and sellers have a total strength of 912,000; the decrease of 9 per cent., as compared with the previous census, is due to the change of system in dealing with occupations practised in conjunction with agriculture to which allusion has so often been made.

Order VIII—
Light, Fanning
and Forage

348. Of the $1\frac{1}{2}$ million persons supported by Order VIII, five-sixths are collectors and sellers of grass, fodder, firewood and charcoal. About 100,000, as compared with only 35,000 in 1891, are supported by the coal-mines, chiefly of Bengal, which are rapidly springing into importance.

Order IX—
Buildings.

The number of persons supported by occupations connected with building is also about a million and a half, of whom a quarter are engaged with building materials (chiefly bricks, tiles and lime) and the rest are masons, builders and thatchers. There has been an increase in the number of persons thus employed, especially in the case of brick and tile makers. In many parts of the country, those who are able to afford it are replacing structures of less durable materials by houses of brick.

Order X—
Vehicles and
vessels

349 Less than one-seventh of a million persons returned their means of support as connected with the construction of vehicles and vessels. This small number is divided in nearly equal proportions between the three Sub-orders, which relate respectively to (a) railway plant, (b) carts, carriages, etc., and (c) ships and boats. The number of the last mentioned is smaller than one would have expected, and is less by 19 per cent. than in 1891; possibly some of the builders of country boats were returned under the general head of carpenters.‡

Order XI—
Supplemen-
tary Requir-
ements

350 A miscellany of occupations are collected in Order XI, but the total number of persons contained in it is less than $1\frac{1}{4}$ million. The manufacture of paper supports about 16,000 persons, and work in printing presses nearly 73,000, or 25 per cent. more than in 1891. About one-third of the paper makers are employed in mills, chiefly in Bengal, and the rest make it by hand; the hand-made article includes the rough paper prepared in the Shan States which is used for wrappers, umbrellas, etc. Only 5,000 are returned as wood carvers, 3,000 as ivory carvers and 6,000 as mica, flint and talc workers and sellers. On the other hand turners and lacquerers number 36,000, *kukka* stem

* The number of "grain dealers" in Bombay has fallen from 875,161 to 312,644

† In the Punjab a decrease under this head from 495,034 to 28,401 has been accompanied by an increase in the number of grain dealers from 344,166 to 509,995. In Rajputana a fall from 178,266 to 12,531 is accompanied by a similar rise from 17,270 to 85,380.

‡ In the United Provinces the number of actual workers under this head is only 34 and in Bombay only 210.

makers and sellers 21,000, and toy, kite and cage makers and sellers 17,000. The making of bangles, necklaces, beads and sacred threads affords support to more than half a million persons, of whom 188 and 152 thousand, respectively, live by the making and selling (a) of glass and (b) of other kinds of bangles; the former have increased by 3 per cent. during the decade, but the latter have declined by 11 per cent. Nearly a third of a million are returned under Sub-order 36—Tools and Machinery. The great majority (about a quarter of a million) are makers of ploughs and agricultural implements; they are more than 2½ times as numerous as in 1891, when many must have been accredited to the general group for blacksmiths, which shows a considerable shrinkage at the present census.

351. A far more important head in the scheme is Order XII—Textile fabrics and Dress, which is the means of support of nearly 11½ millions or 38 per thousand of the population. There are five Sub-orders, which, with the population supported by them, are noted in the margin. More than three-quarters of the persons dependent on occupations in Sub-order 38 are weavers of blankets, woollen cloth and the like, and we

*Sub order	Population supported in thousands
38. Wool and Fur	804
39. Silk	400
40. Cotton	7,702
41. Jute, Hemp, Flax, Coir, etc	649
42. Dress	2,069

have already seen how at the present census there has been a large transfer from this group to the kindred one of shepherds, etc., in Order IV. In the Punjab, says Mr Rose, woollen industries show a remarkable development, and the carpet-making business of Amritsar is flourishing, but here as elsewhere, save only in Central India, a decline is indicated by the census figures. There is a considerable apparent increase in the number of silk-weavers and the like, but it is not certain that this is altogether genuine. It may be due to the greater success in discriminating between this occupation and cotton-weaving, owing to more care having been taken to secure proper entries in the schedules.

352. Cotton-weavers show a decline of 10 per cent, *viz*, from 6,448,120 in 1891 to 5,808,243,* according to the returns of the present census, but the decline is mainly, if not wholly, fictitious. In Bengal 35 rent-payers per 10,000 returned weaving as a subsidiary occupation, so also did 24 per 10,000 farm-servants and field-labourers and 195 per 10,000 Jhum cultivators, and under the system of tabulation adopted in 1891 all of these would have been classed as weavers in the main occupation table. If these persons had been similarly treated on the present occasion, it would have resulted in that Province in an addition of 16 per cent. to the figure entered in Sub-order 40.† A similar addition to the proportion of weavers in India at large would give a figure slightly in excess of that returned in 1891. There is admittedly a great element of uncertainty about all such calculations, and the only point which it is desired to make is that the comparison of the results of the two enumerations cannot be relied upon to prove that the occupation of weaving supports fewer persons than it did ten years ago. It may do so, or it may not, but so far as the census figures are concerned the deficiency may equally well be due to other causes. The above remarks refer to India as a whole. The relation between the figures of the present enumeration and those of 1891 varies greatly in certain provinces and states. There is an increase under this head in Berar, Rajputana, and Kashmir. In Bengal, Madras, the United Provinces, Assam and Hyderabad the falling off is less than the shrinkage which would be expected, having regard to the change of system above alluded to, and in Bombay,‡ the Punjab and Mysore it does not very greatly exceed it, but in

Provinces, etc	Number supported per 10,000	
	1901	1891.
Burma	186	313
Central Provinces	329	447
Baroda	185	284
Central India Agency	125	193

the provinces noted in the margin the reduction is so considerable as to call for some other explanation. Either there has been a real diminution in the proportion of persons dependent on weaving, due, perhaps, except in Burma, to direct and indirect losses

* Includes 347,728 persons employed in cotton mills who were not shown separately in 1891.

† It is safer to make the calculation on the total of the Sub order, as in the supplementary return alluded to the occupations were interpreted in the widest possible sense, and spinners were thus added to weavers, in the discussion that follows, however, weavers are dealt with separately.

‡ In Bombay there would have been a heavy fall in the proportion of the population who are weavers but for the growth of the cotton mills which now account for one-third of the total number. The growth of mills also explains the increased proportion of weavers in Berar and Hyderabad.

from famine, or the schedules have been filled in differently, *e.g.*, in respect of women who weave cloths for domestic wear. Cotton spinners, sizers and yarn beaters number four-fifths of a million or 25 per cent less than in 1891. The decline is greatest in the Central Provinces, Madras, the Punjab, the United Provinces, Ajmer, Baroda, Berar and Hyderabad. It is not always easy to distinguish between this occupation and weaving, but there seems very little doubt that there has been a genuine decrease, as even the hand weavers show a constantly growing tendency to use machine-made yarn.

353 The number of workers in jute and other fibres, with their families, has risen from 461 to 649 thousand. About one-third of the total are operatives, etc., in the Bengal jute mills and jute presses, who aggregate 143,000 compared with only 38,000 ten years ago. The number of rope, sacking and net makers, etc., has risen from 289 to 413 thousand, owing to the figures for Madras including the States of Cochin and Travancore, where 233,000 have been returned against only 22,000 in 1891, a considerable number of persons having apparently been transferred to this head from that provided for "fibre matting and bag makers and sellers", whose number in that Presidency has declined from 102 to 15 thousand.*

Sub-order 42—Dress is returned as the means of support of about 2 million persons, of whom more than half are "tailors, milliners, dress-makers and darners," *i.e.*, mostly *darzis*, and three-quarters of the remainder are "piece-goods dealers". In the Sub-order as a whole there is a decline of 15 per cent in comparison with 1891.

Order
XIII—
Metals and
Precious
Stone

354. The workers and dealers in metals and precious stones and their dependents number nearly $3\frac{3}{4}$ millions. There are four Sub-orders, *viz.*, 43—Gold, silver and precious stones with $1\frac{3}{4}$ million persons; 44—Brass, copper and bell metal with nearly two-fifths of a million; 45—Tin, zinc, etc., with 76,000; and 46—Iron and steel with $1\frac{1}{2}$ million persons. A comparison with the corresponding figures for 1891 shows a decline of only 3 per cent, so that in reality there has probably been a considerable increase, as in addition to the entry of many persons with dual occupations under some agricultural heading, there has been, as already noted, a transfer of about 100,000 persons to the group 'plough and agricultural implement makers' in Sub-order 36. That there should be an increase is only natural; the handicrafts here dealt with do not suffer much from European competition while, with growing prosperity, the people may be expected to take more and more to metal utensils for domestic purposes and to augment their stock of ornaments and jewellery.

Order XIV—
Glass,
Earthen and
Stoneware

355. The persons dependent on the manufacture of earthenware and kindred occupations number rather more than two millions, of whom four-fifths are the ordinary village potters who meet the simple requirements of their neighbours in the matter of earthen pots, plates, pitchers and other vessels. Their number has declined by 9 per cent since 1891.

Order XV—
Wood, Cane
and Leather,
etc.

There are $3\frac{1}{4}$ million persons who are supported by occupations in Order XV, of whom 2 millions are ordinary carpenters, $1\frac{1}{2}$ million are basket, mat, etc., makers, and a quarter of a million are wood cutters and sawyers. Of 10,000 operatives in saw-mills, two-thirds are returned from Burma. This province enjoys a flourishing timber trade, especially in teak and *pyinkado*, and at most seasons of the year the principal waterways are crowded with rafts of timber on their way to Rangoon and Moulmein; in this Province 15 persons per mille are supported by Sub-order 49—Wood and bamboos, compared with 8 per mille in India as a whole.

Order XVI—
Drugs,
Gums, Dyes,
etc.

356 The various avocations grouped under the general head "Drugs, Gums, Dyes, etc.," afford a livelihood to less than half a million persons including, amongst others, saltpetre refiners, chemists and druggists, perfume, incense and sandalwood preparers and sellers, collectors of lac, wax, honey, camphor, gum and rubber, and persons occupied with miscellaneous drugs and dyes. There is an increase of 16 per cent in comparison with 1891, chiefly under the heads provided for miscellaneous drugs and dyes.

Order
XVII—
Leather

Leather working and skin dressing with their cognate occupations are the means of subsistence of $3\frac{1}{4}$ million persons, or about the same as in 1891. The figures for detailed groups are of very little interest, as they depend more on

* The States of Cochin and Travancore, which were dealt with on this occasion by independent Census Superintendents are mainly responsible for these variations.

the idiosyncrasies of the census staff than on actual facts. In one of the Madras districts, for example, most of the leather workers have returned themselves, or been classified, as makers of well-buckets

357. Class E—Commerce, Transport and Storage includes the avocations of 7½ million persons, of whom more than 4 millions are found in Order XVIII—Commerce. The latter figure, however, is swollen by the inclusion of more than 1½ million “Shopkeepers, otherwise unspecified” many of whom, if more completely returned, would have been entered under one of the heads provided in Class D for the sale of various material substances. There are a million ‘Bankers and money lenders,’ or rather more than in 1891, and 486,000 ‘General merchants,’ against more than double that number ten years ago. The decrease in the Order as a whole amounts to 10 per cent, which is probably less than the loss arising from the different treatment accorded to occupations combined with agriculture.

358. Of the 3½ million persons in Order XIX, about half a million find a livelihood in connection with the working of railways (Sub-order 58). There are 1,600,000 persons in Sub-Order 59—Road, of whom more than a third are carters and cartowners, a third are owners and drivers of pack-ponies, bullocks, etc, and a sixth are *palki*-bearers. Sub-order 60—Water, with over three-quarters of a million, derives 71 per cent of its total strength from the single group ‘Boat and barge men’ Sub-order 61—Messages includes service in the post office and telegraph departments which support 134,000 and 20,000 respectively; there are also a few persons employed in connection with telephones.

Owing to a great diminution in the number of persons shown as dependent on service in the postal department, the number of persons in this Sub-order is less than half that returned in 1891. The decline is greatest in Bengal, where the number of persons returned as dependent on post office employment has fallen from 121 to 28 thousand, but it is also very marked in Bombay, Madras, the United Provinces and the Central Provinces, and the Punjab alone in British territory shows an increase. The census figures for actual

Province	NUMBER OF PERSONS EMPLOYED IN THE POST OFFICE	
	Census figures	Departmental returns for 1901
Assam	1,539	2,020
Bengal	10,337	14,632
Bombay	6,445	8,096
Burma	1,411	1,767
Central Provinces	2,609	3,278
Madras	8,233	9,692
Punjab	6,769	7,919
United Provinces	6,493	8,443

Notes—Miscellaneous agents, such as schoolmasters, who are not primarily postal servants, are omitted from the departmental figures

workers in the post office in some of the main provinces are compared in the margin with those published by the Director General. The former are in all cases less than the latter, owing partly to the vagueness of the entries in the schedules, especially in the case of postmen and other subordinates, who form a very large proportion of the total, which has led to their classification under some more general head, and partly to their having in some cases returned some other means of livelihood as their principal one. The Telegraph

Department as a whole shows a fair increase in the number of its employees, but there are great variations in the figures for the upper grades and subordinates taken separately. In Sub-order 62—Storage and Weighing, less than half a million persons are included, of whom three-quarters are porters

The Order as a whole shows a decrease of 11 per cent. There is a large increase under ‘Railways,’ and ‘Water’ is stationary, but there is a heavy falling off in the other Sub-orders. That under messages has been dealt with above. In the case of ‘storage and weighing’ it is explained by the extraordinary figures returned for Rajputana in 1891 when 305,000 persons were classed as porters, or more than half the total for the whole of India, compared with only 5,000 at the present census, which is a much more probable figure. The distinction between a porter and a general labourer, as returned in the census schedules, is not always clear, and the method of classification adopted in different tracts does not seem to have been very uniform. Madras, for example, is credited

* Persons engaged in constructing railway carriages and in throwing up railway embankments are shown in other parts of the scheme

with 169,000 porters, compared with 46,000 in Bengal and 47,000 in the United Provinces. There is a noticeable fall in the number of watchmen at stores, and in Bombay, Burma and Madras the number now returned varies from one-sixth to one-twenty-second of the corresponding figures for 1891.

Class F—
Professions

359. Class F contains five million persons or 17 per thousand of the population. All of these, except 128,000 in Order XXI—Sport, are included in Order XX—Learned and Artistic Professions, but it should be noted that this Order covers several occupations which are neither learned nor artistic. There are for example nearly 700,000 religious mendicants and inmates of monasteries, many of whom are almost indistinguishable from the ordinary beggars who find a place in Class II, 132,000 temple servants, burning-*ghát* attendants and the like, 46,000 petition-writers and touts, 319,000 medical practitioners without any diploma, 13,000 vaccinators and 89,000 midwives. Of the 266,000 'bandmasters and players,' the great majority are low-caste drummers and tom-tom beaters and the 284,000 'actors, singers and dancers' also belong mainly to the gypsy and vagrant fraternity, and many of them might more correctly have been entered as prostitutes. There are $1\frac{1}{2}$ million persons returned as priests, but here too the figures are swollen by the inclusion of many who are really mendicants, or who described themselves as priests merely because they were Bráhmans by caste, and the decline of 19 per cent since 1891 may be due in part to the elimination of misdescriptions of this kind. There are 128,000 astrologers and diviners, and 464,000 professors and teachers. Lawyers of various kinds number 142,000 or rather more than in 1891. There is a considerable increase in the number of lawyers' clerks and petition-writers, but this is due mainly to a more correct description of occupations in the schedules which has reduced the number of 'clerks unspecified' from 226 to 170 thousand. The medical profession supports more than half a million and "Engineering and Survey" a hundred thousand. There has been an increase under both heads since 1891. In individual groups the most noticeable change is in that for "Practitioners with diploma" which contains 43,000 persons compared with only 16,000 at the previous census.

Class G—
Earthwork
and General
Labour

360. There are about $18\frac{1}{4}$ million persons, or 63 per mille, in Class G, all but $1\frac{1}{4}$ million of whom are included in the single group "General labour," i.e., they are ordinary landless labourers, who, as already noticed, in most cases depend mainly on field work for their support. The decrease of 29 per cent. in comparison with 1891 has already been explained. At the time when the census was taken, tank digging supported two-fifths of a million, and labour on roads, railways and canals rather more than half a million. Earth-work is generally carried on only during the dry season, and at other times of the year these people seek other forms of employment. Many who were returned merely as 'coolies,' and so were classed under the head 'General labour,' were probably engaged in work of this description. The persons whose occupations were incompletely recorded number only 545 thousand against 1,395 thousand in 1891. The real decrease is even larger than the above figures would indicate, as those for the present census include a quarter of a million persons whose occupations were described as 'service,' and who in 1891 were classed under the head of "personal services."

Class H—In-
dependent of
Occupation.

361. The last class to be mentioned is that of persons who do not work for their livelihood, but live on their income from property other than land, or on alms, or on allowances of various kinds, or at the State expense. Their number is 5 millions, and more than four-fifths of them are ordinary beggars. It has already been mentioned that, although religious mendicants are entered in a separate part of the scheme, the distinction between the two groups is hazy and uncertain. The two together include 4,914,000 persons or $6\frac{1}{2}$ per cent. fewer than at the previous census. The decline is due in part to the comparatively heavy mortality amongst beggars during the famine years, but it is also partly attributable to the spread of education and the consequently weaker hold which the so-called ascetics have on the imagination of the people; it is much less easy than it was formerly for the members of the various begging fraternities to unloose the purse strings of the villagers. About 354,000 persons said that Government pensions were their chief means of subsistence and 156,000 were in jails or asylums.

Occupation by Caste.

362 The combination of caste and occupation, which would have been impossible under the old method of abstraction by ticks, offers no insuperable difficulties when dealt with on the slip system, and a table presenting these statistics was therefore added at the present census to the series prescribed in 1891. It was, however, left to the option of Local Governments to cause it to be prepared or not, as they might think fit, with the result that in only four provinces was the table attempted, and in two of these the population included in its scope was small.

PROVINCE	Number of castes	Population dealt with (actual workers only)
Bengal	130	17,128,664
Central Provinces	121	6,687,181
Madras	21	3,672,655
Bombay	17	2,014,232

The table was also prepared in five Native States, *viz.*, Central India, Mysore, Travancore, Baroda and Cochin.

363 In view of the fragmentary nature of the statistics, a general review is impossible, and the subject can best be dealt with by extracts from the reports of the Superintendents who prepared this return. The following is an excerpt from the Bengal report:—

“In considering the statistics of occupation by caste it must be borne in mind that, on the one hand, there is the tendency on the part of some of the functional castes, which has already been alluded to, to describe as their occupation that which is assigned to them by tradition, and on the other, the fact that in these statistics only the principal occupation has been dealt with, and that many who mentioned agriculture as their principal means of support may have named their caste occupation as a subsidiary one.

“Conditions vary so greatly in different parts of this large province that the figures for each sub-province frequently disclose very divergent results. The most striking feature of the statistics which have been collected is the extent to which the different functional castes have abandoned their traditional occupations, especially in Bihar. The Ahir or Goálá is in theory a danyman, but in Bihar four-fifths of the total number are cultivators, and barely 1 in 20 follows the traditional caste occupation. In Bengal proper, however, the proportion is much higher, and nearly a third of the total number keep cows and sell milk. The proportion is about 1 in 7 amongst the Gauras who are the corresponding caste of Orissa. The Chamár should be a worker in leather, but in Bihar only 7 per cent were returned under this head, while two-thirds were shown in Order V—Agriculture, and nearly one-fifth as earth-workers and general labourers. In Bengal proper, on the other hand, nearly a quarter of the total number are leather workers and only a third follow agricultural pursuits. The Hajjás and Nápts are more faithful to their traditional profession, two-fifths of them were returned as barbers in Bihar and more than half in Bengal proper. The proportion of Kumhárs who are still potters is also fairly high, being nearly 2 in 5. Nearly half the Telis of Bihar subsist by cultivation, but more than a third of them follow their traditional occupation of oil-pressing. In Bengal proper nearly half the Joláhás or Muhammadan weavers live by weaving, but only a quarter do so in Bihar. The Tántis, or Hindu weavers, have given up their characteristic handicraft to a much greater extent, and only 1 in 9 still are cotton weavers in Bihar and 9 in 20 in Bengal proper. The proportion of weavers is even smaller amongst the Páns of Orissa, being only 1 in 18. Lastly the Bráhmans follow priestly pursuits to a very limited extent. In Bengal proper barely 1 in 6 is a priest, in Bihar 1 in 13, and in Orissa only 1 in 34. The low proportion in the last-mentioned sub-province is due to the inclusion of the degraded Mástán Bráhmans who are usually ordinary cultivators.

“The above discussion is based solely on the census statistics. In subsidiary table VIII, I have given details of the caste or nationality of the officers of certain departments of Government compiled from official publications and independent enquiries based thereon. The most noticeable feature of this return is the very small share of high appointments which falls to the Muhammadans, and the practical monopoly of all such appointments held by Hindus by the members of the Bráhmaṇ, Baidya and Káyasth castes. The Hindus are less than twice as numerous as the followers of the Prophet, but they hold nearly nine times the number of high appointments, *viz.*, 1,235 compared with only 141. Again, of the total Hindu population, less than 1 in every 11 is a Bráhmaṇ, Baidya or Kayasth; but these three castes between them hold 1,104 of the 1,235 appointments filled by Hindus. Their advantage is still more marked if we consider only the highest appointments. The three High Court Judgeships and the 22 posts in the Covenanted and Statutory Civil Service which are held by Hindus, are all filled by members of these three castes. As regards their relative success amongst themselves, it will be noticed that the Baidyas have by far the largest share of these appointments and the Bráhmans the smallest. The Baidyas are outnumbered by the Bráhmans and Káyasths in the ratios of 34 to 1 and 15 to 1, respectively, yet they can boast of 7 Covenanted and Statutory Civilians compared with only 2 who are Bráhmans and 13 who are Káyasths. Of the Deputy and Sub-Deputy Magistrates, 70 are Baidyas, 128 Bráhmans and 114 Káyasths. The proportion of Baidyas is not so high amongst the Sub-judges and Munsifs, but, even here, with 40 appointments, compared with 136 filled by Bráhmans and 160 by Káyasths, they have far more than their fair numerical share. On the other hand, the Rájputs and Khattris, though they number nearly a million and a half, hold only 5 high appointments, and the Bábhans with over a million hold none. The Goálás with nearly 4 millions claim but 1 appointment—

a subordinate post in the Medical Department. Numerous castes are entirely unrepresented in the higher grades of the Civil Service of the State, amongst whom it will suffice to mention the Rājbanis and Namasudras with an aggregate strength of nearly 4 millions, and the Kurmis and Bagdas, each numbering over a million.

"In conclusion we may glance briefly at some of the results disclosed by the Appendix to Table XVI which gives the distribution by caste of the persons engaged on some of the main occupations. It is unnecessary to refer again to Group 2—Officers of Government, as the constituent castes of this group have just been considered with reference to the more detailed statistics collected independently. In Group 3—Clerks, Inspectors, etc., the Káyasths, with nearly 10,000 appointments, easily hold the first place. They are followed by the Brahmans with about 6,000, while the Baidya is the only other caste that can claim more than 1,000 actual workers in this group. Amongst zamindars, the Bráhmans, who number about 88,000, are most numerous, then follow the Káyasths with 73,000, the Bábhans with 36,000 and the Rájputs with 25,000. Bráhman zamindars are found all over the Province. They are especially numerous in the Orissa, Presidency, Patna and Dacca Divisions, but they are outnumbered in the Presidency and Dacca Divisions by the Káyasths and in Patna by the Bábhans and Rájputs, especially by the former, who are more than twice as numerous. Of the other castes, the first place is taken by the Kaibarttas with nearly 11,000 landholders, mostly in Bengal proper, and next to them come the following, all of whom contribute more than 4,000 to the total, the divisions where they are mainly found are noted against each caste—Ahir and Goálá (Presidency and Patna), Baidya (Dacca and Chittagong), Karan (Orissa), Khandait (Orissa), Kurmi (Patna), Namasudra (Presidency and Dacca), Rájbanis (Rajshahi), Shahá (Dacca and Rajshahi), and Telí (Burdwan). The agents and managers of landed estates and the officers of the postal and telegraph departments are mainly Bráhmans and Káyasths, and the same castes hold a leading position, in point of numbers, amongst professors and teachers in schools and lawyers and law agents. They also considerably outnumber the Baidyas amongst medical practitioners, but the latter, of whom the practice of medicine is the traditional occupation, stand easily first if the proportional figures are looked to. Of the total number of Baidyas 1 in every 20 has been returned as a medical practitioner (actual worker), whereas amongst Káyasths and Bráhmans the corresponding proportions are only 1 in 193 and 1 in 400 respectively."

Madras.

363. Mr Francis deals with the matter thus :—

"These figures are of much interest. They will in the first place effectually demolish any vestige which may remain of the idea that the functions of the South Indian castes are still confined to the narrow limits laid down for them in Manu and the Vedas or by tradition, and that the Bráhmans are still exclusively engaged in priestly duties, the trader castes in commerce, and the cultivator and agricultural labourer castes in tilling the land, that the weaver castes still confine themselves to providing the clothes, and the toddy-drawer castes, the liquid refreshment, of the village community, and that the cobbler and the smith castes still stick exclusively to the last and the anvil at which their forefathers worked for so many generations. The trader castes (Kavarai, and its Telugu equivalent Bahija) and the cultivator castes (Maravan and Kallan) shown in the table were not selected as being typical followers of these two callings, but for other reasons, and it is not perhaps fair to argue from the figures in their cases. The Pallis, again, are a caste which is compounded of very many subdivisions, and which has no very clearly defined traditional occupation. But all the others are particularly typical representatives of those who follow the occupations traditionally assigned to each, and the results in their cases may be declared to be of wide application."

"Looking into the statistics regarding them we find that, as was perhaps to be expected, the agricultural labourer has done the least of all of them to get himself out of the rut to which he was consigned. Yet even among this class, as many as 5 per cent, even of the unprogressive Cherumans of the West Coast, are engaged in occupations which are in no sense agricultural, and in the case of the Malas of the Telugu districts the percentage rises to 12. The weavers and artisans come next in faithfulness to their traditional employment, and those who have left it have mainly taken to the land. The leather-workers and toddy-drawers are less exclusive, but probably in their cases the large numbers who have returned agricultural occupations have been actuated rather by the desire to magnify the respectability of their social position than to assist the earnest enquirer after sociological facts by the strictest regard for accuracy in making the returns. But of all the castes the Bráhmans show the greatest divergence from their accepted position. Only 11.4 of them follow their traditional calling, even if among these are included astrology and begging, and of the remainder considerable numbers are engaged in such unorthodox occupations as field-labour, money-lending, trade in grain, condiments, vegetables, gold and silver and even tobacco and snuff, accursed and unclean as these latter used once to be considered. No less than 60 per cent. of them have found agriculture a more congenial calling than the priesthood."

"The table gives figures for the Bráhmans of each of the main linguistic divisions, and it is interesting to notice how much more catholic in their callings the Oriyá-speaking members of the caste are than their less secular brethren. They are the only section which returns masons and builders and dye makers and silk-sellers among its members, and they are responsible for most of the agricultural labourers, vegetable sellers and snuff-dealers to which reference has been made above. As was to be anticipated, the Malayálam Bráhmans, who are mainly made up of the Namubudris of Malabar, a section which is famous for its aloofness from the world and its adherence to the old order of things, are more largely engaged in priestly duties and temple-service than any other division. Twenty-three per cent. of them are so employed, while in no other section is the percentage even half of this, and among the Canarese Bráhmans it is as low as 6.7. The percentage of those engaged in the public service is highest (7) among Tamil

Bráhmans, and lowest among the Oryás (5). On the other hand, fewer of the Tamil section than of any other are land-holders and tenants, the Canarese division showing the highest percentage engaged in such callings. All these figures correspond closely with the known characteristics of the various sections in these respects which have been already referred to in the caste glossary attached to the preceding chapter.

"The means of subsistence of the Eurasians are of interest in connection with the ever-recurring discussions regarding the future and prospects of the race. The figures in subsidiary table 13 give the occupations of the 5,718 actual workers who reside in the three districts in which the race is most numerously represented, namely, Madras City (4,093), Malabar (1,149), and Chingleput (486). Most of those in the last of these three reside in Perambur, just outside the Madras municipal limits, and the figures of Chingleput and Madras may therefore be taken together. The Malabar Eurasian also differs little from his East Coast brother in occupation, except that he provides most of the tailors, carpenters, agriculturists and coffee estate employes in the list. The figures for all three districts are therefore, as in other cases, combined together in subsidiary table 13. In examining them it must be borne in mind that, as has already been pointed out in the last chapter, Native Christians have in some cases returned themselves as Eurasians, although they could lay no claim to the slightest admixture of white blood in their veins, with the idea of raising themselves in the social scale. The most noticeable point about the statistics is the great variety of the occupations in which Eurasians are engaged. None of the other communities selected approach them in this respect. The list gives 52 callings followed by seven persons or more and 68 per cent of the community live by others which are followed by even less than this number. Excluding subsistence on endowments and scholarships (most of the persons comprised under which are the inmates of the orphan and other asylums in Madras City), there is no occupation in the list which is followed by as many as 8 per cent of the community. The popular idea that Eurasians are mainly employed as fitters or clerks or on the railways is therefore clearly inaccurate. The next most noticeable fact is that 178 of the 'actual workers' in the list live on endowments, on their relatives and friends, in convents, in lunatic asylums, in jail or by begging. Subsidiary table 13 does not distinguish males from females, and it may therefore be added that of the 5,718 actual workers shown therein 1,690 are women. Of these, 537 are inmates of orphan asylums, etc., 262 are sempstresses and milliners, 201 school teachers, 107 midwives and hospital nurses, 81 are in domestic service, and 38 are shop assistants and clerks."

364. In Bombay, says Mr. Enthoven :—

Bombay

"It will be observed, on a reference to the table at the end of this Chapter, that at the present day 22 per cent of the Bráhmans, of whom 100,000 were taken as a test, follow the traditional occupation of priest and student. The prohibition against State service and agriculture is now of little weight, since 47 per cent follow those two methods of earning a livelihood. Possibly, the peculiar circumstances of the present day are held to constitute the exception provided for in Manu. How far the absolute prohibition against a Bráhmaṇ selling cooked food, condiments or salt, milk, and sugar, is consistent with the fact that 5 per cent. are occupied in the 'supply of food, drink, and stimulants,' we need not pause to enquire. The 'supply of textile fabrics and cloth' seems almost equally irregular from Manu's point of view. The high percentage of the caste following agriculture is largely due to the Karnátaḥ Bráhmans, of whom 75 per cent. are apparently agriculturists. In occupation, the Smḍhi Bráhmans would appear to be the most orthodox, since 54 per cent of the selected number have been shown under the 'learned and artistic professions.' The Váṁis may perhaps be taken as the nearest approximation to the Vaishyas of Manu's Code, to whom trade and agriculture were allotted as occupations. They appear to show 25 per cent in commerce, to which, perhaps, should be added 39 per cent in the supply of food and drink, 10 per cent in textile fabrics and dress, as well as 3 per cent under agriculture, if we wish to arrive at the true percentage following lawful employment. It is interesting to note that this caste now shows 2 per cent. in administration, compared with the 7 per cent. of the Bráhmans."

"The Maráṭha and the Maráṭha Kunbi show their respective preferences for agriculture by the figures 89 and 96. The Amil division of the Loháṇas, originally traders, have 42 per cent in administration, the highest average of any caste. Kostís and Sális should be weavers. They have 64 per cent of their workers occupied in weaving, the number rising to 90 per cent in the case of the Deccan weavers, and falling to 38 in the Karnátaḥ. The Karnátaḥ weavers appear mostly under 'agriculture,' which seems to offer them a livelihood in periods of depression in trade. Kunbis are cultivators and apparently are content to cultivate, 97 per cent are included in the head of 'Agriculture.' It is perhaps noticeable that 1 per cent in Gujarát are shown under 'Administration.' In Káthiáwár, Kunbis are said to be developing a taste for the service of the State. Of the Kolis, Bhils, and Kátkaris, 92, 60 and 60 per cent. are employed in agriculture. In former days these tribes were very largely occupied in committing gang robberies and other depredations on their more peaceful neighbours, from which pursuits they sought relief very much as the Coste when he has 'done jumping on his mother.' If the number in column 21, 'earth-work and general labour,' and column 9, 'light, firing and forage,' are added to the above, it will be seen that the number following occupations which they could return to the Police without fear of unpleasant consequences is very considerable."

"It must be explained, in conclusion, that the reason for showing 88 per cent of the Shikaris as following their traditional occupation when this percentage is taken from column 7, 'personal household and sanitary service,' is that this caste, which is found in Sind, is not a hunting caste as has sometimes been imagined from the name, but a caste of sweepers, who are Musalmans, and may rise in the social scale to the more respectable caste of Machis by passing through the fire with certain rites and ceremonies."

Caste or
race of
Government
officers —
Bengal

365 In the extract from the Bengal report quoted above, it has been shown that though the Hindus of that Province are less than twice as numerous as the Muhammadans, they hold nine times the number of high appointments under Government, and that the Bráhmans, Baidyas and Káyasths, though they form less than one-eleventh of the total Hindu population, hold between them 1,104 of the 1,235 high appointments held by Hindus. An examination of similar statistics for several other provinces which have been collected with the assistance of the Provincial Superintendents shows that this monopoly of high appointments by a few favoured castes is not by any means peculiar to Bengal.

United
Provinces

366. In the United Provinces of 1,192 such appointments held by persons other than Europeans and Eurasians, 28 are held by Native Christians, Sikhs, Parsis and Jains, Muhammadans hold 453 and Hindus 711. The Muhammadans are only one-sixth as numerous as the Hindus and so, in proportion to their numerical strength, they enjoy nearly four times as many high appointments. The disproportion would be still greater if we excluded from the appointments credited to the Hindus 96 held by immigrants from Bengal. The difference between these figures and those found to exist in Bengal, where the bulk of the Muhammadans are local converts from depressed communities, is very noticeable, but it has its counterpart in the relative prevalence of education amongst Hindus and Muhammadans in the two provinces referred to in the last Chapter.* Of the 615 posts in the possession of the local Hindus, no less than 584 are held by members of five castes—Bráhman, Baniya, Káyasth, Khatri and Rájput. In other words 95 per cent. of the appointments are held by only a quarter of the Hindu population and the remaining three-quarters claim between them only 5 per cent. The Chamárs have a strength of nearly 6 millions, but not a single post in the higher grades of Government service is held by a member of this caste. The Kahárs, Kurmis, Lodhas and Pásis are similarly unrepresented, although they each number more than a million, and so are the Dhobis, Gadarias, Kachhis, Koiris, Koris, Kumhars, Muraos, Nais and Telis each of which has upwards of half a million. Of the five castes who practically monopolize the appointments enjoyed by Hindus, the Khatri in proportion to their numbers do best; they are barely one-ninth as numerous as the Káyasths, but hold more than a quarter as many appointments. The Káyasths again, with only one-ninth the strength of the Bráhmans, can boast of 224 appointments to the latter's 165.

Bombay

367. In Bombay, the Parsis claim 86 high appointments, the Muhammadans 23, and the Hindus 266. There are 187 times as many Hindus as there are Parsis, but the former only hold 3 appointments to 1 held by a Parsi. The Hindus, again, have more than 11 appointments to 1 held by a Muhammadan, but their population is less than four times as great. The Bráhmans, though forming less than one-thirteenth of the total number of Hindus, hold 8 appointments out of 11, and the Prabhus, Baniyas and "Sindhi Hindus," many of whom doubtless belong to the above castes, all but 4 of the remainder. The return contains no entry of any Marátha, Kunbi, Koli, Lingáyat or Mahar although these castes have a strength of from $1\frac{1}{2}$ to $3\frac{3}{4}$ millions each.

Central
Province
and Assam

368 In the Central Provinces the Parsis fill 9 appointments of the kind under consideration, and the Native Christians 3, Muhammadans 75 and Hindus 339. As in the United Provinces the Muhammadans have considerably more than their fair numerical share, and in the general population they are outnumbered by the Hindus in the ratio of 27 to 1. Of the Hindus who fill these appointments 229 are Bráhmans, 68 are Káyasths, 12 Baliyas, 11 Baniyas and 10 Rájputs; these 5 castes form only one-tenth of the Hindu population, but the remaining nine-tenths have only 9 appointments between them. In proportion to their numbers the Káyasths are the most highly favoured, and with only one-eleventh of the Bráhman population they possess nearly one-third as many appointments.

In Assam, of high appointments held by natives of the country the occupants of 2 are Native Christians and of 17 Muhammadans, and the remaining 136 are in the hands of Hindus, of whom there are 50 Káyasths, 47 Bráhmans, 18 Baidyas, 4 Kalitas and 4 Sháhás, leaving only 13 appointments for all other castes combined; with the exception of one of the Native Christians, who is a Khási, not a single member of any Animistic tribe is included in the list.

SUBSIDIARY TABLE I.

General Distribution by Occupation.

ORDER AND SUB-ORDER.	NUMBER PER 10,000 OF TOTAL POPULATION OF INDIA.		NUMBER PER 10,000 OF TOTAL POPULATION OF CITIES.		PERCENTAGE IN EACH ORDER AND SUB ORDER OF		PERCENTAGE OF ACTUAL WORKERS EMPLOYED	
	Persons supported	Actual workers	Persons supported	Actual workers	Actual workers	Dependents	In Cities	Outside Cities
1.	2	3	4	5	6	7	8	9
Total	10,000	4,717	10,000	4,726	47	53	3	97
A.—Government.	191	75	726	300	39	61	13	87
I.—Administration.	139	47	359	130	36	64	9	91
1. Civil Service of the State	42	14	265	93	35	65	21	79
2. Service of Local and Municipal Bodies	9	4	72	29	40	60	26	74
3. Village Service	79	29	22	8	37	63	1	99
II.—Defence.	13	8	88	50	60	40	20	80
4. Army	13	8	84	17	60	40	19	81
5. Navy and Marine		...	4	3	84	16	82	18
III.—Service of Native and Foreign States.	48	20	279	120	42	58	19	81
6. Civil Officers	36	14	171	71	41	59	16	84
7. Military Officers	12	6	108	49	47	53	28	72
B.—Pasture and Agriculture.	6,651	3,090	808	374	46	54		100
IV.—Provision and care of animals.	135	87	53	23	64	36	1	99
8. Stock breeding and dealing	133	86	40	19	64	36	1	99
9. Training and care of animals	2	1	13	4	40	60	15	85
V.—Agriculture.	6,516	3,003	815	351	46	54		100
10. Landholders and Tenants	5,190	2,229	582	239	43	57		100
11. Agricultural Labour	1,204	713	141	73	59	11		100
12. Growth of Special Products	89	49	44	21	54	46	1	99
13. Agricultural Training and Supervision and Forests	33	12	48	18	39	62	5	95
C.—Personal Services.	364	189	1,218	657	52	48	11	89
VI.—Personal, Household and Sanitary Service.	364	189	1,218	657	52	48	11	89
14. Personal and Domestic Services	309	161	1,079	581	52	48	12	88
15. Non-Domestic Establishments	3	1	21	9	45	55	26	74
16. Sanitation	52	27	118	67	51	49	8	92
D.—Preparation and Supply of Material Substances.	1,554	739	3,974	1,835	48	52	8	92
VII.—Food, Drink and Stimulants.	570	276	1,163	534	48	52	6	94
17. Animal Food	135	64	225	95	47	53	5	95
18. Vegetable Food	300	154	655	319	51	49	7	93
19. Drinks, Condiments and Stimulants	135	58	283	120	43	57	7	93
VIII.—Light, Firing and Forage.	50	30	107	56	60	40	6	94
20. Lighting	4	2	13	6	49	51	11	89
21. Fuel and Forage	46	28	94	50	61	39	6	94

SUBSIDIARY TABLE I—*contd.*General Distribution by Occupation—*contd.*

ORDER AND SUB ORDER	NUMBER PER 10,000 OF TOTAL POPULATION OF INDIA		NUMBER PER 10,000 OF TOTAL POPULATION OF CITIES		PERCENTAGE IN EACH ORDER AND SUB ORDER OF		PERCENTAGE OF ACTUAL WORKERS EMPLOYED	
	Per one supported	Actual workers	Persons supported	Actual workers	Actual workers	Dependants	In Cities	Outside Cities
1	2	3	4	5	6	7	8	9
D.—Preparation and Supply of Material Substances—<i>contd.</i>								
IX.—Buildings.								
	54	23	262	109	43	57	15	85
22 Building Materials	14	6	89	19	47	53	10	90
23 Artificers in Building	40	17	223	90	41	59	18	82
X.—Vehicles and Vessels.								
	4	2	44	18	37	63	34	66
24 Railway and Tramway Plant	1	1	20	12	40	60	64	56
25 Carts, Carriages, etc.	1	1	13	5	39	61	27	73
26 Ships and Boats	2	..	2	1	34	66	8	92
XI.—Supplementary Requirements.								
	42	18	252	107	44	56	19	81
27 Paper	1	..	13	5	46	54	33	67
28 Books and Prints	4	2	80	34	39	61	72	28
29 Watches, Clocks and Scientific Instru- ments	2	1	10	3	35	65	61	39
30 Carving and Engraving	2	1	17	8	44	56	27	73
31 Toys and Curiosities	2	1	13	5	39	61	29	71
32 Music and Musical Instruments . . . . .	..	..	3	1	43	57	22	78
33 Bangles, Necklaces, Sacred Threads, etc.	18	9	55	25	50	50	9	91
34 Furniture	1	..	8	3	35	65	44	56
35 Harness	1	..	6	2	42	58	37	63
36 Tools and Machinery	11	4	33	15	37	63	12	88
37 Arms and Ammunition	2	1	14	6	41	59	26	74
XII.—Textile Fabrics and Dress.								
	381	194	1,207	617	51	49	10	90
38 Wool and Fur	13	7	39	18	50	50	9	91
39 Silk	14	7	101	58	56	44	22	78
40 Cotton	262	135	629	340	52	48	8	92
41 Jute, Hemp, Flax, Con, etc.	22	14	80	48	62	38	11	89
42 Dress	70	81	368	168	44	56	16	84
XIII.—Metals and Precious Stones.								
	126	47	393	152	38	62	10	90
43 Gold, Silver and Precious Stones	60	21	216	79	36	64	12	88
44 Brass, Copper and Bell-Metal	13	5	60	22	37	63	15	85
45 Tin, Zinc, Quicksilver and Lead	3	1	29	12	39	61	37	63
46 Iron and Steel	50	20	94	39	40	60	6	94
XIV.—Glass, Earthen and Stone ware								
	73	35	61	29	49	51	3	97
47 Glass and Chinaware	1	..	9	4	38	62	51	49
48 Earthen and Stoneware	72	35	52	25	49	51	2	98
XV.—Wood, Cane and Leaves, etc.								
	120	59	243	108	45	55	6	94
49 Wood and Palms	85	34	189	80	39	61	8	92
50 Cane-work, Matting and Leaves, etc.	44	25	54	28	58	42	4	96
XVI.—Drugs, Gums, Dyes, etc.								
	15	7	61	24	47	53	11	89
51 Gums, Wax, Resins and Similar Forest Products	3	2	10	4	58	42	8	92
52 Drugs, Dyes, Pigments, etc.	12	5	51	20	44	56	12	88
XVII.—Leather								
	110	48	181	81	43	57	6	94
53. Leather, Horn and Bones, etc.	110	48	181	81	43	57	6	94

SUBSIDIARY TABLE I—*concl'd.*General Distribution by Occupation—*concl'd.*

ORDER AND SUB ORDER	NUMBER PER 10,000 OF TOTAL POPULATION OF INDIA		NUMBER PER 10,000 OF TOTAL POPULATION OF CITIES		PERCENTAGE IN EACH ORDER AND SUB ORDER OF		PERCENTAGE OF ACTUAL WORKERS EMPLOYED	
	Persons supported	Actual workers	Persons supported	Actual workers	Actual workers	Dependents	In Cities	Outside Cities
1	2	3	4	5	6	7	8	9
E.—Commerce, Transport and Storage.	203	108	1,247	564	41	59	17	83
XVIII.—Commerce.	143	55	592	236	38	62	14	86
54 Money and Securities	41	14	127	47	35	65	11	89
55 General Merchandise	25	10	127	49	39	61	16	84
56 Dealing unspecified	63	26	211	94	11	59	12	88
57 Middlemen, Brokers and Agents	14	5	127	46	36	64	30	70
XIX.—Transport and Storage.	120	53	655	328	44	56	20	80
58 Railway	17	7	153	61	42	58	27	73
59 Road	55	24	191	87	43	57	12	88
60 Water	27	13	141	100	49	51	25	75
61 Messages	6	2	38	14	38	62	23	77
62 Storage and Weighing	16	7	129	66	45	55	29	71
F.—Professions.	172	71	598	228	41	59	10	90
XX.—Learned and Artistic Professions.	168	69	587	223	41	59	11	89
63 Religion	93	39	194	81	42	58	7	93
64 Education	17	6	76	27	39	61	14	86
65 Literature	2	3	78	24	37	63	35	65
66 Law	10	3	70	20	37	73	25	75
67 Medicine	18	7	78	28	39	61	13	87
68 Engineering and Survey	3	1	29	8	37	63	22	78
69 Natural Science	1	1	1	1	41	59	45	55
70 Pictorial Art, and Sculpture	1	1	12	5	44	56	29	71
71 Music, Acting and Dancing	19	9	19	23	48	52	8	92
XXI. Sport.	4	2	11	5	47	53	8	92
72 Sport	1	1	1	2	44	56	8	92
73 Games and Exhibitions	3	1	7	3	48	52	7	93
G.—Unskilled Labour, not agricultural.	635	349	938	537	55	45	5	95
XXII.—Earthwork and General Labour.	610	335	826	467	55	45	5	95
74 Earth-work, etc.	34	21	39	21	61	10	3	97
75 General labour	576	314	787	446	55	45	5	95
XXIII.—Indefinite and Disreputable Occupations.	25	14	112	70	56	44	16	84
76 Indefinite	19	10	65	35	53	47	12	88
77 Disreputable	6	4	47	35	66	34	27	73
H.—Means of Subsistence, Independent of Occupation.	170	96	431	231	56	44	8	92
XXIV.—Independent.	170	96	431	231	56	44	8	92
78 Property and Alms	153	87	267	150	57	43	6	94
79. At the public charge	17	9	164	81	53	47	29	71

Distribution of the Agricultural, Industrial, Commercial

PROVINCE STATE OR AGENCY	AGRICULTURE.				INDUSTRY			
	Population supported by agriculture	Proportion of agricultural population per 1,000 of population of Province, State or Agency.	PERCENTAGE OF AGRICULTURAL POPULATION OF		Population supported by industry.	Proportion of industrial population per 1,000 of population of Province, State or Agency	PERCENTAGE OF INDUSTRIAL POPULATION OF	
			Actual workers	Dependents			Actual workers	Dependents
1	2	3.	4	5.	6	7.	8.	9
INDIA.*	191,691,731	652	46	54	45,719,922	155	48	52
Ajmer-Merwara	254,763	534	63	37	85,247	179	58	47
Assam	5,160,971	842	49	51	479,358	78	54	46
Baluchistan and Agency . .	577,097	712	34	66	21,463	26	45	55
Bengal and States	56,128,687	715	37	63	9,654,684	123	47	53
Bihar	2,016,067	732	71	29	354,406	129	57	43
Bombay and States	11,927,569	586	55	45	4,641,300	182	46	54
Burma	6,850,763	661	42	58	1,923,084	186	56	44
Central Provinces and States . .	8,313,319	700	68	32	1,927,094	162	65	35
Cooch	147,690	818	71	29	17,228	95	62	38
Madhya and States	26,673,907	690	56	44	6,772,987	175	47	53
North West Frontier Province	13,280,046	569	36	64	5,198,463	194	39	61
Punjab and States								
United Provinces of Agra and Oudh and States	31,742,667	655	48	52	7,245,711	149	47	53
Baroda State	1,014,927	520	45	55	277,313	142	46	54
Central India Agency	4,342,274	503	52	48	1,475,561	171	54	46
Cochin State	412,256	508	44	56	263,068	324	49	51
Hyderabad State	5,132,902	461	40	60	1,928,578	173	43	57
Kashmir State	2,184,860	752	28	72	328,681	113	41	59
Mysore State	3,657,462	660	31	69	591,067	107	34	66
Rajputana Agency	5,479,298	564	64	36	1,768,082	182	55	45
Travancore State	1,392,712	472	35	65	765,370	259	48	52

* The figures for "India" are inclusive of the Andamans

TABLE

and Professional Population by Locality.

COMMERCE.				PROFESSIONS				PROVINCE, STATE OR AGENCY
Population supported by commerce	Proportion of commercial population per 1,000 of population of Province, State or Agency.	PERCENTAGE ON COMMERCIAL POPULATION OF		Population supported by professions.	Proportion of professional population per 1,000 of population of Province, State or Agency	PERCENTAGE ON PROFESSIONAL POPULATION OF		
		Actual workers	Dependents.			Actual workers	Dependents.	
10.	11.	12.	13.	14.	15.	16.	17.	18.
4,197,771	14	38	62	4,928,092	17	41	59	INDIA.
7,102	15	40	60	12,094	25	56	44	Ajmer-Merwara.
47,906	8	54	46	84,065	14	38	62	Assam.
17,693	22	38	62	4,259	5	45	55	Baluchistan and Agency
661,079	8	39	61	1,341,167	17	40	60	Bengal and States
44,868	16	41	59	40,924	15	48	52	Berar.
518,110	20	37	63	474,014	19	40	60	Bombay and States
230,561	22	47	53	262,273	25	51	49	Burma.
89,361	8	49	51	117,878	10	56	44	Central Provinces and States
439	2	56	44	1,752	10	47	53	Coorg
280,630	8	33	67	628,776	16	36	64	Madras and States
780,664	28	35	65	572,295	21	38	62	{ North-West Frontier Province Punjab and States
370,459	8	30	70	639,804	13	40	60	United Provinces of Agra and Oudh and States
61,080	31	38	62	53,263	27	47	53	Baroda State
183,025	21	43	57	115,572	13.	47	53	Central India Agency
7,547	9	35	65	25,792	32	40	60	Cochin State
427,974	38	40	60	142,790	13	41	59	Hyderabad State
56,515	19	33	67	48,816	17	37	63	Kashmir State
105,404	19	35	65	87,426	16	34	66	Mysore State
239,436	25	39	61	201,197	21	53	47	Rajputana Agency
78,140	26	36	64	73,726	25	35	65	Travancore State

which are omitted from the details that follow

SUBSIDIARY

Number per mille of Population supported

ORDER	NUMBER PER MILE OF								
	India	Ajmer-Merwara	Assam	Baluchistan	Bengal	Bihar	Bombay	Burma	Central Provinces
1	2	3	4	5	6	7	8	9	10
ALL OCCUPATIONS.	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
A.—Government.	19	24	6	34	7	34	34	19	15
I—Administration	13	14	4	12	7	33	23	15	13
II—Defence	1	9	2	18		1	2	3	1
III—Service of Native and Foreign States	5	1	..	4	...	...	9	1	1
B.—Pasture and Agriculture.	665	545	844	776	724	741	605	670	727
IV—Provision and care of animals	13	11	2	64	9	9	19	9	27
V—Agriculture	652	534	842	712	715	732	586	661	700
C.—Personal Services.	36	59	12	14	22	19	31	10	23
VI—Personal, Household and Sanitary services	36	59	12	14	22	19	31	10	23
D.—Preparation and supply of Material Substances.	156	179	78	27	123	129	182	186	162
VII—Food, Drink and Stimulants	57	57	46	10	59	35	57	95	48
VIII—Light, Firing and Forage	5	5	1	2	3	7	13	3	12
IX—Buildings	6	6	2	1	3	4	9	6	4
X—Vehicles and Vessels . . . . .	..	...	..	...	1	...	1	2	..
XI—Supplementary requirements	4	7	1	1	3	4	4	4	3
XII—Textile Fabrics and Dress	38	41	13	4	24	36	46	41	52
XIII—Metals and Precious stones	13	13	6	3	10	13	15	9	15
XIV—Glass, Earthen and Stone ware	7	10	3	1	6	6	7	3	6
XV—Wood, Cane and Leaves, etc	13	10	5	2	9	15	16	21	12
XVI—Drugs, Gums, Dyes, etc	2	8	...	...	1	2	1	1	1
XVII—Leather, etc	11	22	1	3	4	7	13	1	9
E.—Commerce, Transport and Storage.	26	43	14	113	20	25	35	43	16
XVIII—Commerce	14	15	8	22	9	16	19	22	8
XIX—Transport and Storage	12	28	6	91	11	9	15	21	8
F.—Professions.	17	26	14	5	17	16	20	25	10
XX—Learned and Artistic Professions	17	25	14	5	17	15	19	25	10
XXI—Sport . . . . .	..	1	...	...	...	1	...	...	..
G.—Unskilled Labour not Agricultural.	64	106	18	22	79	19	69	43	34
XXII—Forth work and General labour	61	103	18	19	75	18	66	42	34
XXIII—Indefinite and Disreputable occupations	3	3	...	3	4	1	3	1	..
H.—Means of subsistence independent of occupation.	17	18	14	9	8	17	25	4	13
XXIV—Independent	17	18	14	9	8	17	25	4	13

TABLE III.

by each Order of Occupation.

POPULATION SUPPORTED IN

Coorg.	Madras	Punjab.	United Provinces	Baroda State	Central India Agency	Hyderabad State	Kashmir State	Mysore State	Rajputana Agency	ORDER
11	12	13	14	15	16	17	18	19	20	21
1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	ALL OCCUPATIONS.
8	17	21	13	41	42	55	17	38	44	A.—Government.
8	16	13	12	12	3	35	4	20	14	I—Administration
	1	5	1	..	2	2	1	2	..	II—Defence
		3	...	29	37	18	12	16	30	III—Service of Native and Foreign States
821	707	580	665	541	525	486	761	675	579	B.—Pasture and Agriculture.
3	16	11	11	21	22	25	12	15	16	IV—Provision and care of animal
818	691	569	654	520	503	461	752	660	563	V—Agriculture
23	28	69	56	50	56	59	20	31	47	C.—Personal Services.
23	28	69	56	50	56	59	20	31	17	VI—Personal Household and Sanitary services.
95	175	194	150	142	171	173	113	107	182	D.—Preparation and Supply of Material Substances.
54	68	45	56	35	48	48	26	24	54	VII—Food, Drink and Stimulant
1	5	4	2	5	12	2	3	6	8	VIII.—Light, Firing and Forage
4	9	7	3	8	4	8	2	9	7	IX—Buildings
	1	.	.	1	...				.	X.—Vehicles and Vessels
2	3	9	5	4	5	4	6	3	5	XI—Supplementary requirements
8	42	57	40	35	35	47	16	27	44	XII—Textile Fabrics and Dress
10	14	15	14	13	12	17	7	16	12	XIII—Metals and Precious stones
1	5	11	9	14	10	8	5	5	14	XIV—Glass, Earthen and Stone ware
11	16	15	11	10	16	14	7	9	13	XV—Wood, Cane and Leaves etc
..	2	1	3	2	4	2	.	1	1	XVI—Drugs, Gums, Dyes, etc
1	12	30	7	15	25	23	11	7	24	XVII—Leather, etc
11	21	45	19	35	25	45	28	24	31	E.—Commerce, Transport and Storage.
2	7	28	8	31	21	39	19	19	25	XVIII.—Commerce
12	14	17	11	4	4	6	9	5	6	XIX—Transport and storage
11	17	22	14	29	14	13	17	17	21	F.—Professions.
10	16	21	13	27	13	13	17	16	21	XX—Learned and Artistic Professions
1	1	1	1	2	1		...	1	...	XXI—Sport
21	23	36	68	133	131	132	16	90	57	G.—Unskilled Labour not Agricultural.
21	32	34	65	133	130	129	16	86	57	XXII—Earthwork and General labour
	1	2	3	...	1	3	..	4	...	XXIII—Indefinite and Disreputable occupations
7	12	33	15	29	36	37	25	18	39	H.—Means of subsistence independent of occupation.
7	12	33	15	29	36	37	25	18	39	XXIV—Independent

SUBSIDIARY

Proportion of Population supported

Occupation	Groups included	NUMBER PER 10,000 OF			
		India	Assam.	Bengal	Bombay.
1	2.	3.	4.	5	6
1 Landlords and tenants	36, 37, 40, 49, 50, 51, 52 .	5,386	7,239	6,429	4,284
<i>Labourers</i> . . . .	.....	1,869	378	1,507	2,407
2 Agricultural labourers	38, 39	1,189	150	686	1,566
3 General labourers	96, 102, 149, 150, 165, 360, 420, 441, 500, 501, 502, 504.	730	238	871	841
4 Stock-owners, milkmen and herdsmen .	26, 27, 30, 31, 32, 78, 82 .	165	45	147	221
5 Cotton workers (not in mills) . . .	271, 272, 275, 276, 278 .	240	94	141	203
6 Goldsmiths and blacksmiths . . .	317, 328	97	35	73	105
7 Brass, copper and bell metal workers .	322, 323	13	9	14	15
8 Carpenters	230, 344, 346 . . .	86	29	46	108
9 Fishermen and boatmen	79, 80, 429	106	266	190	99
10 Oil pressers	100, 101, 143, 144 . .	63	19	62	50
11. Barbers	60	77	21	59	74
12 Washermen	65	68	14	43	36
13 Toddy-drawers and sellers	131, 132	31	01	12	6
14 Grain parchers	98	26	6	32	9
15 Leather workers	387 to 390	98	13	40	100
16 Basket makers, scavengers and drummers	74, 347 to 349 and 483 .	104	28	67	77
17 Priests	444, 447	60	75	69	8
18 Potters	155, 336, 337 . . .	76	30	63	32
19. Mendicants	446, 513	167	127	88	265
20 Village quacks and midwives . . .	468, 472	14	10	19	8
21. Grocers and confectioners	99, 103, 104, 124 . .	80	40	83	118
22 Grain dealers and money lenders .	97, 392, 394	114	38	65	151
23 Tailors	306	39	14	23	52
24 Vegetable and fruit sellers	105, 123	48	37	47	54
25 Other shopkeepers	398, 398 (a), 400 . .	52	54	35	52
26. Makers and sellers of bangles . . .	208 to 211	12	5	7	12
27 Silk-worm rears and silk weavers .	259, 260	10	1	15	20
TOTAL . . . .	...	9,001	8,622	9,376	8,619

TABLE IV.

by certain Primitive Occupations.

TOTAL POPULATION						Occupation
Burma.	Central Provinces	Madras	Punjab	United Provinces	Native States	
7	8	9	10	11	12	13
2,408	4,757	4,882	5,511	5,588	4,436	1 Landlords and tenants
4,700	2,692	2,367	627	1,639	1,895	Labourers
4,171	2,212	1,978	176	902	797	2 Agricultural labourers
529	480	389	451	737	1,098	3. General labourers
91	303	174	122	129	213	4 Stock owners, milkmen and herdsmen
242	404	315	454	260	209	5. Cotton workers (not in mills)
66	117	112	118	112	105	6 Goldsmiths and blacksmiths
4	16	15	10	12	13	7 Brass, copper and bell metal workers
130	49	96	156	88	101	8 Carpenters
282	87	119	13	19	48	9 Fishermen and boatmen
31	83	12	49	114	56	10 Oil pressers
3	61	60	112	128	81	11 Barbers
9	48	144	49	97	76	12 Washermen
71	1	83	2	2	90	13 Toddy-drawers and sellers
1	47	5	22	65	7	14 Grain parchers
9	92	85	289	69	165	15 Leather workers
66	83	83	330	117	82	16 Basket makers, scavengers and drummers
6	23	52	112	51	71	17 Priests
33	62	58	122	91	91	18 Potters
155	147	83	305	145	278	19 Mendicants
44	7	17	11	8	9	20 Village quacks and midwives
126	37	175	33	48	37	21 Grocers and confectioners
83	124	82	191	167	122	22 Grain dealers and money lenders
56	31	19	44	67	44	23 Tailors
88	48	53	39	47	44	24 Vegetable and fruit sellers
151	5	14	137	17	88	25 Other shopkeepers
1	14	10	7	21	15	26 Makers and sellers of bangles
33	13	14	5	3	2	27 Silk-worm rearsers and silk weavers
8,888	9,354	9,159	8,866	9,104	8,378	TOTAL

SUBSIDIARY TABLE V.

Occupations of Females by Orders, selected Sub-orders and Groups.

Group No	Order or Sub Order	NUMBER OF ACTUAL WORKERS		Number of females per 1,000 males
		Males	Females	
1.	2	3.	4	5
	ALL OCCUPATIONS.	95,709,280	43,046,902	450
	I.—ADMINISTRATION.	1,307,999	70,973	54
	II.—DEFENCE.	238,193	455	2
	III.—SERVICE OF NATIVE AND FOREIGN STATES.	558,852	30,962	55
	IV. — PROVISION AND CARE OF ANIMALS.	2,199,278	346,579	158
	8. Stock-Breeding and Dealing.	2,173,337	343,652	158
27	Herdsmen	1,439,088	193,209	134
30	Sheep and goat breeders and dealers	145,113	21,003	165
31	Shepherds and goatherds	387,520	68,470	228
	V.—AGRICULTURE.	60,827,087	27,520,631	452
	10. Land-holders and Tenants.	48,404,893	17,160,291	355
36	Rent receivers	14,377,965	6,151,933	428
37	Rent payers	34,026,928	11,008,358	324
	11. Agricultural Labourers.	11,201,280	9,786,848	874
38	Farm-servants	1,995,767	500,585	251
39	Field-labourers	8,678,314	8,954,149	1,032
40	Taungya or jhum cultivators	527,199	332,114	630
	12. Growers of special Products	867,683	561,167	647
48	Ten plantations—labourers and other subordinates	329,434	309,691	940
52	Fruit and vegetable growers	194,045	120,616	622
	VI.—PERSONAL, HOUSEHOLD AND SANITARY SERVICES.	3,760,267	1,805,703	480
	14. Personal and Domestic Services.	3,249,965	1,494,830	460
60	Barbers	829,579	162,773	196
61	Cooks	138,560	55,820	403
64	Indoor servants	783,686	435,255	555
65	Washermen	630,288	478,976	760
66	Water-carriers	318,702	255,139	801
	15. Non-Domestic Establishment.	23,603	10,587	449
	16. Sanitation.	486,699	300,286	617
74	Sweepers and scavengers	481,081	299,248	622
	VII. — FOOD, DRINK AND STIMULANTS.	4,796,381	2,330,834	604

SUBSIDIARY TABLE V—*contd.*Occupations of Females by Orders, selected Sub-orders and Groups - *contd.*

Group No	Order or Sub-Order	NUMBER OF ACTUAL WORKERS		Number of females per 1,000 males
		Males	Females	
1	2	3	4	5
	17. Provision of Animal Food.	1,204,158	667,789	555
76	Butchers and slaughterers	107,490	22,681	211
78	Cow and buffalo keepers, and milk and butter sellers .	284,006	222,091	841
79	Fishermen and fish curers	464,132	114,426	247
80	Fish dealers	321,658	290,716	895
82	Ghi preparers and sellers	29,050	12,720	438
	18. Provision of Vegetable Food.	2,313,323	2,233,425	965
96	Flour grinders	35,671	360,047	10,094
97	Grain and pulse dealers	737,193	217,476	295
98	Grain parchers	187,554	260,841	1,391
100	Oil pressers	342,093	167,635	489
101	Oil sellers	214,169	156,217	729
102	Rice pounders and huskers	55,520	558,972	10,068
103	Sweetmeat makers	49,521	12,629	255
104	Sweetmeat sellers	131,422	90,849	691
105	Vegetable and fruit sellers	222,787	245,820	1,103
	19. Provision of Drink, Condiments and Stimulants.	1,278,900	429,620	336
123	Cardamom, betel-leaf and areca-nut sellers	165,905	83,281	502
124	Grocers and general condiment dealers	510,486	155,865	305
128	Salt sellers	63,195	35,558	563
130	Tobacco and snuff sellers	89,796	42,705	476
132	Toddy sellers	85,981	47,811	550
	VIII.—LIGHT, FIRING AND FORAGE.	406,904	468,988	1,155
	20. Lighting.	33,458	17,566	525
	21. Fuel and Forage.	372,546	451,422	1,212
147	Collieries miners and other subordinates	31,523	27,962	810
149	Hay, grass and fodder sellers	150,352	163,261	1,086
150	Firewood, charcoal and cowdung sellers	183,813	257,691	1,402
	IX.—BUILDINGS	551,482	121,653	221
	22. Building Materials.	133,248	52,462	394
155	Brick and tile makers	61,234	18,248	298
157	Lime, chunam and shell burners	14,150	8,894	593
158	Lime, chunam and shell sellers	19,190	14,722	767

SUBSIDIARY TABLE V—*contd.*Occupations of Females by Orders, selected Sub-orders and Groups—*contd.*

Group No	Order or Sub-Order	NUMBER OF ACTUAL WORKERS.		Number of females per 1,000 males
		Males	Females	
1	2	3	4	5
	23. Artificers in Building.	418,234	60,191	165
	X.—VEHICLES AND VESSELS.	47,205	2,145	45
	XI.— SUPPLEMENTARY REQUIREMENTS.	417,208	123,807	297
	30. Carving and Engraving.	22,351	4,510	202
	31. Toys and Curiosities.	14,502	2,914	201
	32. Music and Musical Instruments.	4,468	704	158
	33. Bangles Necklaces, Beads, Sacred Threads, etc.	173,421	100,661	580
208	Makers of bangles, other than glass	27,597	14,324	519
209	Sellers of bangles, other than glass	21,317	11,352	533
210	Makers of glass bangles	24,211	13,707	566
211	Sellers of glass bangles	34,826	21,176	603
214	Rosary, bead and necklace makers	15,065	9,987	660
215	Rosary, bead and necklace sellers	9,015	5,322	590
216	Flower garland makers and sellers	26,894	17,036	635
217	Makers and sellers of spangles, lingams and sacred threads	6,868	5,592	814
	XII. — TEXTILE FABRICS AND DRESS.	3,507,767	2,210,543	630
	38. Wool and Fur.	119,920	77,574	647
251	Persons occupied with blankets, woollen cloth and yarn, fur, feathers, and natural wool	83,340	60,998	732
254	Dealers in woollen goods, fur and feathers	5,992	1,530	255
	39. Silk.	107,248	117,495	1,096
259	Silk-worm rearers and cocoon gatherers	10,201	39,964	3,918
260	Silk carders, spinners and weavers, makers of silk braid and thread	64,898	67,798	1,053
261	Sellers of raw silk, silk cloth, braid and thread	17,698	6,259	354
	40. Cotton.	2,411,717	1,561,056	647
271	Cotton cleaners, pressers and ginners	153,801	89,942	585
272	Cotton weavers hand industry	1,836,434	832,594	453
275	Cotton spinners, sizers, and yarnbeaters	90,295	509,200	5,639
276	Cotton yarn and thread sellers	23,284	10,472	450
278	Cotton dyers	72,854	27,366	376
	41. Jute, Hemp, Flax, Coir etc.	192,366	210,756	1,096
290	Rope, sack and net makers	74,614	169,090	2,132

SUBSIDIARY TABLE V—*contd.*Occupations of Females by Orders, selected Sub-orders and Groups—*contd.*

Group No	Order or Sub order	NUMBER OF ACTUAL WORKERS		Number of females per 1,000 males
		Males	Females	
1	2	3.	4	5.
291	Rope, sacking and net sellers	17,121	18,538	1,083
292	Fibre matting and bag makers	9,894	9,746	1,037
	42. Dress.	676,516	243,662	360
803	Hosiery and haberdashers	12,862	4,291	333
306	Tailors, milliners, dress makers and darners	369,851	189,458	512
	XIII. METALS AND PRECIOUS STONES.	1,281,163	112,727	88
	43. Gold, Silver, and Precious Stones.	600,931	33,671	56
	XIV. GLASS, EARTHEN AND STONEWARE.	705,744	337,688	478
	48. Earthen and Stone Ware.	699,977	336,705	481
336	Potters and pot and pipe-bowl makers	602,892	281,126	466
337	Sellers of pottery ware	80,734	48,871	605
	XV. WOOD, CANE, AND LEAVES, ETC.	1,288,655	433,363	336
	49. Wood and Bamboos.	918,573	60,970	66
345	Dealers in timber and bamboos	51,288	19,633	383
	50. Cane work, Matting and Leaves, etc.	370,082	372,393	1,006
347	Baskets, mats, fans, screens, brooms, etc, makers and sellers .	328,600	330,552	1,006
349	Leaf-plate makers and sellers	26,125	35,697	1,366
349(a)	Pith and bark collectors, workers and sellers	2,003	625	312
	XVI. DRUGS, GUMS, DYES, ETC.	151,832	64,103	422
	51. Gums Wax, Resins, and similar Forest Produce.	33,171	24,372	735
	52. Drugs, Dyes, Pigments, etc.	118,661	39,731	335
363	Saltpetre refiners	16,333	9,510	582
363	Saltpetre sellers	3,942	2,012	510
	XVII. LEATHER, ETC.	1,149,243	251,956	219
	XVIII. COMMERCE.	1,380,654	222,998	162
	54. Money and Securities.	357 184	62,298	174
	56. Dealing unspecified.	645,452	101,698	157
	XIX. TRANSPORT AND STORAGE.	1,484,481	76,805	52
	62. Storage and Weighing.	177,246	38,017	214

SUBSIDIARY TABLE V—*concl'd.*Occupations of Females by Orders, selected Sub-orders and Groups—*concl'd.*

Group No	Order or Sub-Order	NUMBER OF ACTUAL WORKERS		Number of females per 1,000 males
		Males	Females	
1	2	3	4	5
	XX. LEARNED AND ARTISTIC PROFESSIONS.	1,694,513	326,691	193
	67. Religion.	971,869	178,656	184
446	Religious mendicants, inmates of monasteries, convents, etc	278,752	97,686	350
	63. Medicine.	133,477	70,844	529
472	Midwives	910	58,721	64,582
473	Compounders, matrons, nurses and hospital, asylum and dispensary service	18,846	3,578	258
	70. Pictorial Art and Sculpture.	12,304	4,517	367
486	Tattooers	1,665	3,471	2,085
	71. Music Acting, Dancing, etc.	209,411	58,898	281
490	Actors, singers and dancers, and their accompanists	100,945	53,674	532
	XXI. SPORT.	49,043	9,711	194
	XXII. EARTHWORK AND GENERAL LABOUR.	5,803,321	1,043,577	697
	74. Earthwork, etc.	406,105	202,197	498
501	Tank diggers and excavators	131,019	102,085	779
502	Road, canal and railway labourers	243,581	85,126	350
	75. General Labour.	5,397,216	3,841,380	712
501	General labour	5,397,216	3,841,380	712
	XXIII. INDEFINITE AND DISREPUTABLE OCCUPATIONS.	211,740	204,051	964
	76. Indefinite.	204,974	85,248	416
	77. Disreputable.	6,766	118,803	17,559
506	Prostitutes, including saquins and neauchs	457	116,888	255,772
	XXIV. INDEPENDENT.	1,890,268	929,959	493
	78. Property and Alms.	1,643,758	907,031	552
510	House-rent, shares, and other property not being land	37,598	27,241	725
511	Allowances from patrons or relatives	16,479	11,183	679
512	Educational or other endowments, scholarships, etc	17,202	7,971	463
513	Mendicancy (not in connexion with a religious order)	1,572,479	860,636	547
	79. At the State Expense.	246,510	22,928	93
515	Pension, military services	85,776	7,340	205

SUBSIDIARY TABLE VI.

Proportion of Workers to Dependents and of Female to Male Workers in certain occupations.

Province or State.	NUMBER PER CENT OF		All occupations.	NUMBER OF FEMALE PER 100 MALE WORKERS.							
	Actual workers	Dependents		Groups							
1	2	3	4	35 Rent receivers	37 Rent payers	38 Farm servants	39 Field labourers	44 Indoor servants	45 Water carriers	46 Grain partners	504 General labourers.
INDIA.	47	53	45	43	32	25	103	56	80	139	71
Ajmer-Merwara	60	40	49	54	67	3	82	27	31	56	65
Assam	50	50	54	60	20	22	1,496	33	3	439	53
Baluchistan	36	64	..					10	1		
Bengal	40	60	29	21	17	12	69	98	373	255	51
Berar	67	33	77	12	7	2	147	46	17	125	101
Bombay	53	47	53	63	53	16	76	28	66	60	78
Burma	46	54	57	55	120	38	52	45	30	63	13
Central Provinces	67	33	89	63	88	26	200	92	214	320	138
Coorg	70	30	67	91	77	40	86	47	91	114	61
Madras	53	47	69	62	55	32	159	141	111	173	132
Punjab and North-West Frontier Province	38	62	15	11	8	5	16	14	41	118	26
United Provinces	49	51	43	28	37	12	101	55	84	83	71
Baroda	47	53	46	33	30	36	69	147	125	46	105
Central India	54	46	54	47	45	64	148	30	76	47	95
Cochin	47	53	64	14	31	15	110	551		300	22
Hyderabad	43	57	56	38	49	55	108	34	17	14	114
Kashmir	31	69	10	4	4	11	9	14	31	9	33
Mysore	34	66	26	18	19	32	19	48	40	240	87
Rajputana	61	39	59	25	70	46	134	36	85	59	105
Travancore	43	57	46	22	15	184	84	220	85	356	68

Occupations combined with Agriculture (where

OCCUPATION (CLASS AND ORDER)	NUMBER PER 1,000 WHO								
	India	Ajmer Merwara	Assam	Baluchistan	Bengal	Berar	Bombay	Burma.	Central Provinces.
1	2	3	4	5	6	7	8	9	10
ALL OCCUPATIONS	24	34	18	15	21	12	21	10	6
A.—Government.	126	42	71	200	183	182	130	66	56
I—Administration	155	63	121	105	159	187	155	70	62
II—Defence	134	20	11	253	10	..	86	58	..
III—Service of Native and Foreign States	55	57	36	..	181	..	72	84	36
B.—Pasture and Agriculture.	4	11	0·1	0·1	2	..	5	1	·6
IV—Provision and care of animals	40	76	13	3	22	7	24	28	11
V—Agriculture	3	10	0·1	0·1	1	..	4	..	·2
C.—Personal Services.	77	57	64	23	80	65	61	15	36
VI—Personal, household and sanitary services	77	57	64	23	80	65	61	15	36
D.—Preparation and supply of material substances.	67	102	84	6	74	43	48	26	22
VII—Food, drink and stimulants.	62	110	115	3	67	56	38	27	28
VIII—Light, firing and fireworks	30	28	22	1	31	20	24	17	15
IX—Buildings	44	1	97	30	56	22	50	18	5
X—Vehicles and vessels	52	..	260	43	82	..	59	18	1
XI—Supplementary requirements	63	34	51	56	66	29	33	11	0
XII—Textile fabrics and dress	53	44	14	3	83	24	40	80	15
XIII—Metals and precious stones	104	93	87	3	155	62	60	17	39
XIV—Glass, earthen and stoneware.	125	282	90	...	143	52	84	15	53
XV—Wood, cane and leaves, etc	87	243	84	1	68	66	85	26	15
XVI—Drugs, gums, dyes, etc	52	73	24	..	116	18	33	55	9
XVII—Leather	86	135	109	4	74	54	72	6	19
E.—Commerce, Transport, Storage.	61	30	64	8	81	75	55	27	11
XVIII—Commerce	65	94	60	2	72	107	59	28	15
XIX—Transport and storage	57	6	69	9	86	22	52	27	9
F.—Professions.	86	55	133	15	105	78	50	13	18
XX—Learned and artistic professions	88	56	134	15	106	84	51	13	19
XXI—Sport	37	...	44	..	34	18	19	22	14
G.—Unskilled Labour not Agricultural.	28	36	84	8	26	9	25	16	4
XXII—Earth work and general labour	28	37	86	9	26	8	26	16	4
XXIII—Indefinite and disreputable occupations	27	..	3	1	30	37	6	13	1
H.—Means of Subsistence independent of Occupation.	36	75	6	·6	19	32	35	9	5
XXIV—Independent	36	75	6	·6	19	32	35	9	5

TABLE VII.

Agriculture is the subsidiary occupation).

ARE PARTIALLY AGRICULTURISTS												OCCUPATION (CLASS AND ORDER)
Coorg	Madras	Punjab.	United Provinces.	Batoda State.	Central India Agency.	Hyderabad.	Kashmir.	Cochin	Travancore	Mysore	Rajputana	
11	12	13	14	15	16	17	18	19	20	21	22	23
6	20	22	36	9	27	55	13	6	5	33	37	ALL OCCUPATIONS.
345	239	112	149	25	67	108	28	12	42	220	53	A.—Government.
350	251	76	136	65	45	155	46	...	78	490	92	I.—Administration
...	27	180	241	...	161	6	41	...	...	7	292	II.—Defence
200	286	84	35	8	64	30	81	12	36	125	32	III.—Service of Native and Foreign States
0.02	.9	2	10	1	9	42	1	2	.1	.3	3	B.—Pasture and Agriculture.
4	32	45	82	21	71	78	34	3	9	11	104	IV.—Provision and care of animal.
...	...	.7	9	.1	5	39	1	2	04	..	.	V.—Agriculture
27	112	39	108	22	38	64	38	7	10	113	81	C.—Personal services.
27	112	39	108	22	38	64	38	7	10	113	81	VI.—Personal, household and sanitary services
17	68	48	108	24	40	71	46	8	8	93	121	D.—Preparation and supply of material substances.
14	59	39	95	17	47	83	46	12	12	67	103	VII.—Food, drink and stimulants
29	48	36	40	8	47	63	14	16	2	26	26	VIII.—Light, firing and forage
6	53	21	51	29	21	52	12	5	6	65	56	IX.—Buildings
17	22	25	47	19	40	22	...	...	5	21	31	X.—Vehicles and vessels
6	54	87	98	11	16	41	104	2	8	43	68	XI.—Supplementary requirements
29	55	31	77	15	30	59	25	2	3	90	95	XII.—Textile fabrics and dress
27	100	80	211	37	44	83	63	6	12	181	111	XIII.—Metals and precious stones
6	143	61	177	37	57	82	81	5	11	203	177	XIV.—Glass, earthen and stoneware
22	85	95	165	37	85	61	82	9	8	88	238	XV.—Wood, cane and leaves, etc.
59	41	27	61	7	8	52	15	6	15	27	39	XVI.—Drugs, gums, dyes, etc.
21	116	58	107	42	49	70	110	6	8	59	195	XVII.—Leather.
58	50	60	79	22	30	75	31	7	14	100	74	E.—Commerce, Transport Storage.
36	79	72	87	24	31	75	32	4	17	111	74	XVIII.—Commerce.
61	37	40	75	6	24	74	28	8	7	62	73	XIX.—Transport and storage
154	122	74	106	22	48	78	42	16	27	183	118	F.—Professions.
161	126	76	107	22	50	78	42	16	27	199	119	XX.—Learned and artistic professions
100	30	31	87	15	13	76	33	34	17	20	29	XXI.—Sport
9	32	17	25	9	58	48	16	14	3	11	35	G.—Unskilled Labour not Agricultural.
9	32	17	24	9	58	48	17	14	3	10	35	XXII.—Earth-work and general labour
...	35	12	49	...	7	24	..	8	4	41	7	XXIII.—Indefinite and disreputable occupations.
21	27	28	48	9	11	52	24	4	8	37	96	H.—Means of Subsistence independent of Occupation.
21	27	28	48	9	11	52	24	4	8	37	96	XXIV.—Independent.

SUBSIDIARY TABLE VIII.

Comparison of Occupations with 1891, by Classes, Orders and Sub-Orders.

OCCUPATION.	POPULATION SUPPORTED IN		Variation Increase (+) or Decrease (-).	Variation per cent.
	1891.	1891		
1	2.	3.	4	5
ALL OCCUPATIONS.	294,188,046	287,223,431	+ 6,964,615	+ 2
A.—Government.	5,608,185	5,764,605	- 1,156,420	- 17
I.—Administration.	2,843,904	5,268,024	- 1,424,120	- 27
1 Civil Service of the State .	1,255,310	2,063,038	- 807,723	- 39
2 Service of Local and Municipal Bodies	278,518	118,185	+ 155,883	+ 132
3 Village Service . . .	2,315,076	3,086,856	- 771,780	- 25
II.—Defence.	366,646	664,422	- 297,776	- 45
1 Army	362,326	668,271	- 300,945	- 45
5. Navy and Marine	4,320	1,151	+ 3,169	+ 275
III.—Service of Native and Foreign States.	1,397,635	832,159	+ 565,476	+ 68
6 Civil Officers	1,043,872	690,208	+ 353,664	+ 51
7 Military	353,763	141,951	+ 211,812	+ 149
B.—Pasture and Agriculture.	195,666,204	175,381,239	+ 20,286,965	+ 12
IV.—Provision and Care of Animals.	3,076,473	3,645,840	+ 330,624	+ 9
8 Stock Breeding and Dealing . .	3,904,669	3,585,398	+ 319,271	+ 9
9 Training and care of animals . .	71,804	60,451	+ 11,353	+ 19
V.—Agriculture.	191,691,781	171,735,390	+ 19,956,341	+ 12
10 Land-holders and Tenants . . .	154,570,404	149,981,159	+ 4,689,245	+ 3
11 Agricultural Labourers . . .	33,522,682	18,678,206	+ 14,849,476	+ 80
12 Growers of Special Products . .	2,628,620	2,219,373	+ 409,247	+ 18
13. Agricultural Training and Supervision and Forests	970,025	911,652	+ 58,373	+ 6
C.—Personal Services.	10,717,500	11,210,104	- 492,604	- 4
VI.—Personal, Household and Sanitary Services.	10,717,500	11,210,104	- 492,604	- 4
14 Personal and Domestic Services .	9,103,892	9,998,419	- 894,527	- 9
15. Non domestic Establishment . .	76,088	47,803	+ 28,285	+ 59
16. Sanitation	1,537,520	1,168,882	+ 373,638	+ 32
D.—Preparation and Supply of Material Substances.	45,876,559	48,631,097	- 2,954,538	- 6
VII — Food, Drink and Stimulants.	16,821,800	17,785,217	- 963,417	- 5
17 Provision of Animal Food . . .	3,952,966	4,045,165	- 92,199	- 2

SUBSIDIARY TABLE VIII—*contd.*Comparison of Occupations with 1891, by Classes, Orders and Sub-Orders—*contd.*

OCCUPATION.	POPULATION SUPPORTED IN		Variation Increase (+) or Decrease (—)	Variation per cent.
	1901.	1891.		
1.	2.	3.	4.	5.
18 Provision of Vegetable Food	8,893,280	8,811,324	+81,965	+1
19 Provision of Drink, Condiments and Stimulants	3,975,545	4,928,728	—953,183	—19
VIII.—Light, Firing and Forage.	1,398,212	1,385,491	+12,721	+1
20. Lighting	40,989	26,827	+14,162	+5.3
21. Fuel and Storage	1,357,223	1,358,664	—1,441	—0.1
IX.—Buildings.	1,579,760	1,437,739	+142,021	+10
22 Building Materials	367,564	284,483	+83,081	+29
23. Artificers in Building	1,212,196	1,153,256	+58,940	+5
X.—Vehicles and Vessels.	88,797	103,979	—15,182	—15
25. Carts, Carriages, etc.	43,469	47,728	—4,259	—9
26. Ships and Boats	45,328	56,251	—10,923	—19
XI.—Supplementary Requirements.	1,231,671	1,155,267	+76,404	+7
27. Paper	84,878	78,158	—6,720	—8
28. Books and Prints	114,910	94,277	+20,633	+22
29. Watches, Clocks, and Scientific Instruments	15,455	11,638	+3,817	+33
30 Carving and Engraving	60,790	44,386	+16,404	+37
31. Toys and Curiosities	45,084	69,747	—24,663	—35
32. Music and Musical Instruments	12,064	21,397	—9,333	—44
33. Bangles, Necklaces, Sacred Threads, etc.	548,829	586,739	—37,910	—6
34. Furniture	17,813	15,616	+2,197	+14
35. Harness	15,561	17,406	—1,845	—11
36. Tools and Machinery	316,736	173,593	+143,143	+82
37. Arms and Ammunition	49,556	42,865	+7,191	+17
XII.—Textile Fabrics and Dress.	11,214,158	12,611,454	—1,397,296	—11
38. Wool and Fur	393,843	587,701	—193,858	—33
39. Silk	399,569	319,397	+80,172	+25
40. Cotton	7,702,003	8,820,653	—1,118,650	—13
41. Jute, Hemp, Flax, Coir, etc.	649,406	461,103	+188,213	+41
42 Dress	2,069,832	2,422,510	—353,178	—15

NOTE.—The figures do not always agree with those in Table XV. See note on page 241. Sub-order 24 has been amalgamated with Sub-order 58.

SUBSIDIARY TABLE VIII—*contd.*Comparison of Occupations with 1891. by Classes, Orders and Sub-Orders—*contd.*

OCCUPATION.	POPULATION SUPPORTED IN		Variation. Increase (+) or Decrease (—).	Variation per cent.
	1901.	1891.		
1	2.	3	4.	5.
XIII.—Metals and Precious Stones.	2,710,804	2,821,433	—110,629	—3
43 Gold, Silver and Precious Stones . . .	1,768,597	1,783,874	—15,277	—1
44 Brass, Copper and Bell-metal . . .	390,226	405,600	—15,374	—4
45 Tin, Zinc, Quicksilver and Lead . . .	76,098	59,048	+17,050	+29
46 Iron and Steel	1,475,883	1,572,911	—97,028	—6
XIV.—Glass, Earthen and Stone Ware.	2,143,167	2,360,623	—217,456	—9
47 Glass and China Ware	17,942	14,419	+3,523	+24
48 Earthen and Stone Ware	2,125,225	2,346,204	—220,979	—9
XV.—Wood, Cane and Leaves, etc.	3,790,492	4,293,012	—502,520	—12
49 Wood and Bamboos	2,499,531	2,868,433	—368,902	—13
50 Cane work, Matting and Leaves, etc. . .	1,290,961	1,424,579	—133,618	—9
XVI.—Drugs, Gums, Dyes, etc.	455,763	391,575	+64,188	+16
51 Gums, Wax, Resins and similar Forest Produce	98,483	76,186	+22,297	+29
52 Drugs, Dyes, Pigments, etc	357,280	315,389	+41,891	+13
XVII.—Leather, etc.	3,241,935	3,285,307	—43,372	—1
53 Leather, Horn and Bones	3,241,935	3,285,307	—43,372	—1
E.—Commerce, Transport, Storage.	7,769,403	8,681,101	—911,698	—11
XVIII.—Commerce	4,197,771	4,685,579	—487,808	—10
54 Money and Securities	1,200,998	1,128,283	+72,715	+6
55 General Merchandise	744,704	1,186,892	—442,188	—37
56 Dealing unspecified	1,839,958	1,907,555	—67,597	—4
57 Middlemen, Brokers and Agents	412,111	462,849	—50,738	—11
XIX.—Transport and Storage.	3,571,632	3,995,522	—423,890	—11
58 Railway *	547,356	327,716	+219,640	+67
59 Road	1,605,529	1,808,186	—197,657	—11
60 Water	786,945	789,752	—2,807	—0.4
61 Messages	155,374	327,074	—171,700	—52
62 Storage and weighing	476,428	747,794	—271,366	—36

Excluding Police on Railways

SUBSIDIARY TABLE VIII—*concl'd.*Comparison of Occupations with 1891, by Classes, Orders and Sub-Orders—*concl'd.*

Occupation	POPULATION SUPPORTED IN		Variation Increase (+) or decrease (—)	Variation per cent
	1901.	1891.		
1	2.	3.	4.	5
F—Professions.	5,056,393	5,823,339	— 767,046	—13
XX.—Learned and Artistic Professions.	4,923,092	5,682,159	— 759,067	—13
63 Religion	2,728,812	3,383,416	— 654,604	—19
64. Education	497,509	486,497	+ 11,012	+ 2
65. Literature	199,834	280,703	— 90,869	—29
66. Law	279,646	226,163	+ 53,483	+ 24
67. Medicine	520,044	514,074	+ 5,970	+ 1
68. Engineering and Survey	100,700	94,270	+ 6,430	+ 7
69. Natural Science	1,382	1,354	— 28	— 2
70. Pictorial Art and Sculpture	38,100	45,750	— 7,650	—17
71. Music, Acting, Dancing etc.	562,055	640,926	— 78,871	—14
XXI.— Sport.	123,201	141,180	— 17,979	— 9
72. Sport.	42,627	43,919	— 1,292	— 3
73. Games and Exhibitions	85,574	97,261	— 11,687	—12
G.—Unskilled labour not agricultural.	18,691,364	25,957,953	— 7,266,589	—28
XXII.—Earth-work and General Labour.	17,954,331	24,394,972	— 6,440,641	—26
74. Earth-work, etc.	1,012,235	574,695	+ 437,540	+ 76
75. General Labour	16,942,096	23,820,277	— 6,878,181	—29
XXIII.—Indefinite and Disreputable Occupations.	737,033	1,562,981	— 825,948	—53
76. Indefinite	545,411	1,395,848	— 849,937	—61
77. Disreputable	191,622	167,633	+ 23,989	+ 14
H.—Means of subsistence independent of occupation.	5,000,538	4,773,993	+ 226,545	+ 5
XXIV.—Independent.	5,000,538	4,773,993	+ 226,545	+ 5
78. Property and Alms	4,490,151	4,308,534	+ 181,617	+ 4
79. At the State Expense	510,387	465,459	+ 44,928	+ 10

NOTE.—For the purpose of the above table those groups which were shown in one part of the scheme in 1891, and in a different part at the present census have been transferred to the Order and Sub-order in which they have now been classed. The result is that the totals of Orders and Sub-orders for 1891 shown above differ in some cases from the corresponding totals in the census tables for that census. Where one group of the 1891 census has now been split up into two groups, it has been necessary for the purpose of comparison to amalgamate them. In a few cases the new groups have gone to different Sub-orders, and their amalgamation has affected the totals of the Sub-orders concerned, which in such cases do not agree with the totals shown in Table XV. This has happened, for example, in the case of Sub-orders 10 and 11 owing to the amalgamation of Jhum cultivators shown in Sub-order 11 with rent payers in Sub-order 10. The combination of the figures for thatchers and thatch dealers has similarly affected the totals of Sub-orders 23 and 23, and of those for processors and sellers of vegetable oil for lighting and ordinary oil processors and sellers, the totals of Sub-orders 19 and 20.

SUBSIDIARY TABLE IX.

Comparison of Agricultural population with 1891 by Provinces and States.

PROVINCE, STATE OR AGENCY	NUMBER PER MILE									
	Wholly or mainly Agriculturists, 1901.	Of whom partly non-Agriculturists, 1901.	SOLELY AGRICULTURISTS.		PARTIALLY AGRICULTURISTS.				TOTAL—WHOLLY OR PARTLY AGRICULTURISTS.	
			1901.	1891.	Agriculture main occupation, 1901.	Agriculture subsidiary occupation, 1901.	Total 1901.	Total 1891.	1901.	1891.
1	2	3	4	5	6	7	8	9	10	11
INDIA.	651	60	591	599	60	24	84	46	675.	645
Provinces.	668	55	613	611	55	23	77	48	690	659
Ajmer-Merwara .	584	85	449	484	85	34	119	83	568	517
Assam (b) .	842	82	810	775	82	13	45	88	855	868
Bengal (c) .	715	53	662	634	53	21	74	78	786	707
Berar .	732	30	702	686	30	72	42	8	744	694
Bombay (a) .	586	53	538	580	53	21	74	33	607	613
Burma .	661	25	686	684	25	10	35	1	671	635
Central Provinces .	700	15	685	651	15	6	1	23	706	674
Coorg .	818	15	803	720	15	6	21	27	824	747
Madras (with Cochin and Travancore) .	672	48	624	574	48	19	67	26	691	600
Punjab (with N.-W F) .	569	55	514	572	55	22	77	31	591	603
United Provinces .	655	90	565	610	90	36	126	80	691	690
States.	547	90	457	527	90	26	126	23	583	549
Baroda .	520	23	497	576	23	9	32	22	539	600
Central India .	503	67	436	481	67	27	94	(a)	530	481
Hyderabad .	461	137	324	449	137	55	192	29	516	478
Kashmir .	752	33	719	681	33	13	46	(a)	765	681
Mysore .	660	82	578	666	82	68	115	7	693	673
Rajputana (e) .	564	93	471	540	93	37	130	(a)	601	540

Notes.—The proportions in columns 5 and 9 are based on the Census figures for 1901 which refer to the whole population reported, and those in column 3 on the figures for the whole population in the occupation table for 1901. At this census the return of those who practised agriculture as a secondary occupation was worked out only for actual workers. It may, however, be fairly assumed that the same proportion is applicable also to dependents and the proportions in column 7 have been calculated accordingly.

Bengal was the only Province where figures were given showing how many of the persons who returned agriculture as their principal means of subsistence were partially dependent on some other occupation. Consequently the proportions in columns 3 and 6 (which are identical) are based on the actual results of the census only in the case of Bengal. For other provinces they represent an estimate based on the assumption that the proportion found to exist in Bengal, in the case of persons with dual occupations, between those who returned agriculture as their principal, and those who returned it as their subsidiary means of support, is of general application. It is not claimed that the figures thus obtained are absolutely or even approximately correct, but merely that, in the absence of other data they afford a general indication of the probable proportions.

(a) Figures not available.

(b) The proportion in column 5 has been calculated on the total population excluding North Lushai for which occupation was not returned in 1901. (Population excluded 41,800.)

(c) The proportion in column 5 has been calculated on the total population excluding Hill Tippera (population 127,448) for which occupation was not returned. The proportion in column 9 is based on the figures for 21 districts only. The return prepared for the remaining districts was rejected as untrustworthy.

(d) The proportion in column 5 has been calculated on the total population except the feudatories for which occupation was not returned.

(e) The proportion in column 5 has been calculated on the total population excluding Bausware and Partabgarh (population 309,619).

The figures for Andamans and Baluchistan though taken into account in Subsidiary table I have been left out of account in this subsidiary table.

SUBSIDIARY TABLE X.

Occupations in cities.

INDIA AND Cities.	NUMBER PER 10,000 SUPPORTED BY EACH CLASS OF OCCUPATIONS									NUMBER PER CENT OF		Number of female workers per 100 male
	A.—Gov- ernment.	B.—Fec- ture and Agricul- ture.	C.—Per- sonal services.	D.—Prepa- ration and supply of material substances.	E.—Com- merce, etc.	F.—Learn- ed profes- sions.	G.—Un- skilled labour	H.—Inde- pendent	All occupa- tions.	Actual workers	Depen- dents	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
INDIA.	191	6,651	364	1,554	253	172	635	170	10,000	47	53	45
TOTAL CITIES	726	868	1,318	3,274	1,347	598	938	431	10,000	47	53	27
Calcutta	467	363	1,757	3,205	2,401	646	738	420	10,000	60	40	15
Bombay	410	77	1,277	4,115	1,620	602	1,520	379	10,000	58	42	19
Madras	606	366	1,250	4,240	1,773	864	341	560	10,000	36	64	24
Lucknow	414	961	1,738	3,890	962	578	948	509	10,000	47	53	35
Rangoon	620	201	1,074	4,352	2,324	472	635	222	10,000	62	38	10
Delhi	262	410	989	5,306	1,709	647	474	203	10,000	44	56	22
Lahore	803	742	1,676	3,440	1,605	601	663	470	10,000	40	60	8
Ahmedabad.	316	436	1,018	5,461	756	484	1,122	377	10,000	48	52	39
Cawnpore	221	1,786	1,965	3,465	785	289	1,843	217	10,000	48	52	26
Agra	454	973	1,485	3,796	991	437	1,380	484	10 000	35	65	11
Amritsar	472	399	764	5,193	1,838	662	307	366	10,000	46	54	11
Allahabad	479	3,199	1,393	2,094	374	248	1,387	326	10,000	47	53	43
Howrah	292	509	733	4,145	1,772	614	1,759	281	10,000	55	45	16
Karachi	925	247	1,466	4,723	878	493	952	574	10,000	42	58	6

SUBSIDIARY TABLE XI.

Large Industries.

Group No	Factory, etc	CENSUS FIGURES			TOTAL WORKERS ACCORDING TO RETURN OF LARGE INDUSTRIES IN	
		TOTAL SUPPORTED		Total Workers.	1900.	1901
		India	Main Provinces.			
1.	2.	3.	4.	5.	6.	7.
107-8	Aerated Water Factories	9,094	{ Bombay 4,799 Punjab 1,499 }	6,140	2,893	315
235-236	Arms and Ammunition Factories	2,955	{ Punjab 1,561 Bengal 998 }	2,188	...	...
237-238	Arsenals	4,880	{ Madras 1,327 United Provinces 493 }	1,884	...	...
85-86	Biscuit Factories	2,673	{ Bengal 1,061 Punjab 709 }	1,184	...	...
380-381	Bone Mills	1,598	{ Punjab Bengal 42 }	1,082	991	491
320-321	Brass Foundries	5,092	Bombay	43	17,385 *	9,816
109-110	Breweries	1,765	{ Punjab Madras 35 }	74	3	...
151-152	Brick and Tile Factories	11,568	{ Bengal 6,747 Madras 5,792 }	35	1	...
382-383	Brush Factories	298	Punjab 203	23	258	1,120
340-341	Carpentry Works	12,628	{ Punjab 7,743 Bengal 2,090 }	108	...	...
160-161	Cement Works	2,059	{ Bengal 921 Burma 391 }	5,222	...	...
361-362	Chemical Factories	251	{ Bengal 60 Burma 21 }	1,086	638	162
294-295	Clothing Agencies	23,104	Bombay 16,129	83	364	...
169-170	Coach Building Factories	2,535	{ Punjab 672 Bombay 498 }	9,045	...	...
146-147	Collieries	100,829	Bengal 83,059	843	...	...
263-264	Cotton Ginning, Cleaning and Pressing Mills.	80,503	{ Bombay 20,216 United Provinces 13,875 Central Provinces 8,754 Madras 4,869 }	62,897	89,348	34,827
267-268	Cotton Spinning, Weaving and other Mills.	347,728	{ Bombay 168,655 Madras 17,486 Central Provinces 11,518 Bengal 7,829 Punjab 5,744 }	42,117	49,380	18,842
350-351	Cutch Factory	259	Bombay 217	185,875	156,089	117,922
111-112	Distilleries	7,780	{ Bombay 2,567 United Provinces 1,912 }	95	1,046	4,565
				4,183	1,277	...

* Includes also Iron Foundries, vide Groups 336, 337, and Machinery and Engineering Workshops, Groups 235, 236.

SUBSIDIARY TABLE XI—*contd.*Large Industries—*contd.*

Group No.	Factory, etc.	CENSUS FIGURES			TOTAL WORKERS ACCORDING TO RETURNS OF LARGE INDUSTRIES IN	
		TOTAL SUPPORTED.		Total workers.	1900	1901
		India.	Main Provinces.			
1	2	3	4	5	6	7
426-27 & 431-32	Dockyards, Harbour and Canal Service	52,527	{ Punjab . . . 23,316 Bengal . . . 13,449 }	24,481	...	...
367-368	Dye Works	9,363	{ Punjab . . . 1,674 Bengal . . . 550 }	3,976	799	...
137 (a) & (b)	Electric-lighting	63	Bengal . . . 63	34	...	...
87-88	Flour Mills	5,775	{ Punjab . . . 1,962 United Provinces . . 1,424 Bengal . . . 1,102 }	2,748	2,554	1,172
218-219	Furniture Factories	683	Bombay . . . 524	292	...	...
136-137	Gas-Works	1,742	{ Bengal . . . 876 Bombay . . . 290 }	909	546	...
330-331	Glass Factories	119	Punjab . . . 84	54	126	70
309-310	Gold Mines	12,746	{ Madras . . . 1,451 Burma . . . 390 }	5,398	...	...
241-242	Gun-carriage Factories	2,281	{ Madras . . . 1,744 Bengal . . . 807 }	1,236	...	...
239-240	Gun-powder Factories	2,113	Bengal . . . 1,260	1,003	...	...
296-297	Hosiery Factories	677	Bombay . . . 367	258	...	...
115-116	Ice Factories	3,176	{ United Provinces . . 904 Punjab . . . 749 }	1,223	827	624
326-327	Iron Foundries	12,552	{ Bombay . . . 4,415 Bengal . . . 4,222 }	5,910	Vide Brass Foundries with which this is included.	
285-286	Jute Mills	130,564	Bengal . . . 129,727	78,786	110,462	64,724
283-284	Jute Presses	13,804	Bengal . . . 13,729	5,501	20,785	8,242
352-353	Lea Factories	11,004	{ United Provinces . . 4,958 Bengal . . . 2,510 }	6,649	7,247	3,002
225-226	Machinery and Engineering Workshops	21,363	{ Bengal . . . 15,790 Burma . . . 2,501 }	9,558	Vide Brass Foundries.	
138-139	Match Factories	252	Bengal . . . 147	149	..	..
307-308	Mines	1,949	{ Bengal . . . 562 Bombay . . . 420 }	896	..	...
89-90	Oil Mills	12,333	{ Bengal . . . 3,120 Madras . . . 2,374 }	5,851	5,084	1,651
113-114	Opium Factories	2,750	{ United Provinces . . 1,790 Bengal . . . 706 }	1,083	...	...

SUBSIDIARY TABLE XI—concl'd.

Large Industries—concl'd.

Group No.	Factory, etc.	CENSUS FIGURES.			Total Workers according to Return of Large Industries in	
		TOTAL SUPPORTED.		Total Workers.	1900.	1891.
		India.	Main Provinces.			
1.	2.	3.	4.	5.	6.	7.
179-180	Paper Mills	5,959	Bengal 4,584	4,052	4,871	2,833
140-141	Petroleum Refineries	7,588	{ Burma 3,504 Bombay 2,902 }	3,652	...	...
334-335	Pottery Works	1,281	Bengal 276	708	2,448	1,420
183-184	Printing Presses	65,382	{ Bengal 30,468 Madras 14,185 Bombay 12,175 United Provinces 2,514 }	25,140	14,963	...
167-168	Railway and Tramway Factories	43,363	{ Madras 19,022 Bombay 13,614 Central Provinces 2,690 }	17,267	...	...
91-92	Rice Mills	55,745	Burma 50,581	42,676	12,392	5,668
217-228	Rope Works	4,494	{ Bengal 2,333 Bombay 1,326 }	2,761	2,668	2,850
117-118	Salt Stores	19,717	{ Madras 13,483 Punjab 2,454 }	9,936	...	...
313-343	Saw Mills	11,872	Burma 8,084	7,319	9,711	6,718
215-256	Silk Filatures	20,466	Bengal 19,719	10,870	12,292	6,558
217-228	Silk Mills	5,411	{ Punjab 2,690 Bombay 779 }	2,428	3,229	3,199
303-364	Soap Factories	1,792	{ Punjab 745 Bengal 414 }	746	255	59
153-154	Stone and Marble Works	43,164	Bombay 8,723	18,274	...	...
93-94	Sugar Factories	54,502	{ United Provinces 40,606 Bengal 6,190 }	33,118	5,453	2,693
384-385	Tanneries	20,898	Madras 14,668	8,998	6,900	3,094
269-270	Tent Factories	716	Bengal 379	317	...	...
265-266	Thread Glazing and Polishing Factories	1,125	Bengal 478	604	...	...
119-120	Tobacco Factories	1,350	{ Madras 551 Burma 296 }	630	2,142	1,196
298-299	Umbrella	2,041	Burma 1,767	1,067	...	...
439-440	Warehouse	15,600	Bengal 9,845	6,982	...	...
121-122	Waterworks	8,810	{ Bombay 2,407 Bengal 1,626 Madras 1,773 }	5,331	...	...

CHAPTER VII.

Language.*

"Never ask me what I have said or what I have written; but if you will ask me what my present opinions are, I will tell you."—JOHN HUNTER.

369. THE words of the Father of Modern Surgery, quoted above, are ^{Present} peculiarly applicable to the subject of the present chapter. For nearly thirty ^{knowledge.} years philology has been wandering through the maze of Indian languages with uncertain steps. Eminent scholars like Caldwell, Beames, and Hoernle succeeded, it is true, in marking out a few broad roads; but, off the track so well laid down, a wild luxuriance of language covered with its undergrowth a vast and unknown territory,—a land of mystery in which less cautious wits played with fantastic theories about Siberio-Nubians, Kolarians, and the Lost Ten Tribes. Some eight years ago the Government of India determined to ^{The Linguistic} undertake a systematic exploration of the languages spoken in Northern ^{Survey.} India. The aim of this Linguistic Survey was confined to the ascertainment of facts. The elaboration of theories formed no part of its object. For the purpose in view specimens of every form of speech spoken in every district and state in the area under survey were collected. These are now under examination, and a series of short grammars and vocabularies is being prepared from them. The survey is not yet completed. The languages of Sind, the Himalayas, and of a part of the Punjab, still remain to be discussed, but the greater portion of the work has been done, and the present chapter may be considered as an abstract of its results so far as they are available. These results have been surprising, even to those who were aware of the former limits of our knowledge. The facts which have come to light have upset several theories hitherto accepted by all scholars as certainly correct, and have, even in the short space of time during which they have been available, suggested new theories, which, as more facts appeared, have in their turn proved equally unfounded. Speculations regarding Indian languages must wait till the survey is concluded, and all the facts are presented in a convenient form. Till then, even the classification adopted in the following pages, must be taken as provisional. It represents the arrangement which at the present moment, to my mind, agrees best with the facts which have been hitherto examined, but the discovery of new facts may induce me to modify it.†

370. The Census of 1901 does not cover the whole of India, and for some of ^{Number of} the wildest and most polyglot tracts no language figures are available.‡ Even ^{Languages} ^{spoken.}

* Limits of space alone prevent me from mentioning the names of the many friends who have assisted me in the preparation of this chapter. I cannot, however, refrain from expressing my special obligations to the Rev. T. Grahame Bailey (for help in regard to the dialects spoken in the hills between Murree and Kashmir), to Mr. Galt, to Mr. W. Irvine, to Dr. Sten Konow of Christiania, to Professor E. Kuhn of Munich, to Sir Charles Lyell, to Peter W. Schmidt of Vienna (for criticisms on the section relating to Indo-Chinese languages), to Mr. Vincent Smith, and to Professor Julien Vinson of Paris (for criticisms on the section relating to Egyptian languages). Much that is of value in the following pages I owe to the kindness of these gentlemen, and I take this opportunity of tendering them my heartiest thanks. I must also acknowledge my indebtedness to the various Provincial Superintendents of Census Operations, who have over and over again rendered me great assistance by solving riddles which could only be explained by skilled observers on the spot.—G. A. G.

† In illustration, I may mention that this chapter was drafted about a year ago. Discoveries made since then have compelled me to re-write large portions of it.

‡ No language-census was taken of the greater part of Baluchistan; of British Afghanistan; of the Swat, Kohistan, Chitral, Hunza-Nagar, etc.; and of certain wild hill-tracts in Burma.

allowing for this, no less than 147 distinct languages have been recorded as vernacular in the Indian Empire. They are grouped as follows:—

		Number of languages spoken.	Number of speakers.
A. VERNACULARS OF INDIA.			
Malayo-Polynesian Family—			
Malay Group . . . . .	...	2	7,831*
Indo-Chinese Family—			11,732,299
Môn-Khmér Sub-family	427,760	4	
Tibeto-Burman Sub-family	9,560,454	79	
Siamese-Chinese Sub-family	1,724,083	9	
Dravido-Mundā Family—			59,693,729
Mundā Sub-family	3,179,275	10	
Dravidian Sub-family	56,514,524	14	
Indo-European Family, Aryan Sub-family—			221,127,673
Iranian Branch	1,377,023†	3	
Indo-Aryan Branch	219,780,650	22	
Semitic Family . . . . .	...	1	42,881
Hamitic Family . . . . .	...	1	8,880
Unclassed Languages . . . . .	...	2‡	846,150
Andamanese	1,862		
Gipsy Languages	664,143		
Others	125		
TOTAL VERNACULARS OF INDIA		147	292,966,143
B. LANGUAGES OF OTHER ASIATIC COUNTRIES—			
AFRICA, AUSTRALIA			76,673
C. EUROPEAN LANGUAGES			
Language not returned			269,997
Language not identified, traced, etc			947,164
			191,059
GRAND TOTAL—INDIA			294,361,046

Of these, the Semitic and Hamitic languages are classed as vernaculars, owing to their being spoken in Aden. The rest belong to India Proper. The Indo-Chinese languages are found in the Himalayas, Burma, and North-Eastern India; the Dravido-Mundā ones mainly in the south and centre of the Peninsula; and the Indo-European on the North-Western Frontier, in the Punjab, Bombay, Bengal, Assam, and the country between the State of Hyderabad and the Himalaya.

371. Nowhere are there presented stronger warnings against basing ethnological theories upon linguistic facts than in India. The "unholy alliance" between the two sciences has long been condemned, and has now fallen into disrepute, and I have, hence, in the following pages refrained so far as was possible from discussing questions of racial origin. When I have done so, it has only been to bring forward theories regarding the origin of nationalities which have been previously suggested by professed ethnologists, and to attempt to throw light upon them when they are confirmed by philology. In one case only, is it permissible to draw inferences as to race from the facts presented by language. When we find a small tribe clinging to a dying language, surrounded by a dominant language which has superseded the neighbouring forms of speech, and which is superseding its tongue too, we are fairly entitled to assume that the dying language is the original tribal one; and that it gives a clue to the latter's racial affinities. Take as an instance the Malto spoken by the hillmen of Rajmahal. This language is decadent, and is surrounded by others which are superseding it. Even if we did not know it on other grounds, we should be justified in asserting that its speakers are Dravidian, because their tongue falls within that sub-family. With a dominant language the case is exactly the contrary. In India, the Indo-Aryan languages,—the tongues of civilisation, and of the caste system with all the power and superiority which that system confers upon those who live under its sway,—are continually superseding what may, for shortness, be called the aboriginal languages such as those belonging to the Dravidian, the

* Excluding Javanese and Malay.

† Excluding Persian and Wakhi.

‡ These are really two groups, not two languages.

§ Including Javanese, Malay, Persian, and Wakhi.

Mundā, or the Tibeto-Burman families. We cannot say that a Tibeto-Burman Kōch or a Dravidian Gōnd is an Indo-Aryan, because he speaks, as he often does, an Indo-Aryan language. The language of the Brāhūis of Baluchistan is probably a Dravidian one, but many of the tribe speak the Persian Balōchi in their own homes, and on the other side of India some of the tribe of Khariās speak a Mundā language, others a Dravidian one, and others, again, the Indo-Aryan Bengali. It may be added that nowhere do we see the reverse process of a non-Aryan language superseding an Aryan one. It is even rare for one Aryan-speaking nationality to abandon its tongue in favour of another Aryan one. We continually find tracts of country on the border-land between two languages, which are inhabited by both communities, living side by side and each speaking its own language. In some localities, such as the District of Malda in Bengal, we actually find villages in which three languages are spoken, and in which the various tribes have evolved a kind of *lingua franca* to facilitate intercommunication, while each adheres to its own tongue for conversation amongst its fellows. The only exception to this general rule about the non-interchangeability of Indo-Aryan languages is caused by religion. Islām has carried Urdū far and wide, and even in Bengal and Orissa we find Musalmān natives of the country whose vernacular is not that of their compatriots but is an attempt (often a bad one) to reproduce the idiom of Delhi and Lucknow.

372. This brings us to the question of tribal dialects, a subject that has not hitherto received the attention which it deserves. The matter is complicated by the fact that very frequently a tribe gives its name to a language, not because it is specially the language of the tribe, but because the tribe is an important one in the area in which it is spoken. Take, for example, the language which in the Census of 1891 was called "Jatki," i.e., "the language of the Jat tribe." But Jatki is not by any means the language of the Jat tribe alone. It is the language of the whole of the Western Punjab, in parts of which, it is true, Jats preponderate. The name Jatki was hence misleading (the more so, because the Jats of the Eastern Punjab do not speak "Jatki") and has been abandoned in the present Census for the more tenable "Lahndā," or "Language of the West." So again, in the hills north of Murree there are a number of dialects varying according to locality. One of the important tribes living in these hills is the Chibh, and these Chibhs everywhere speak the dialect of the place where they live. But the question-begging name of "Chibhālī" or "the language of the Chibhs" was invented, and employed to mean "the dialect of the hills north of Murree," whereas, there are several dialects spoken by Chibhs, and, moreover, the Chibhs are by no means the only people who speak them.

Another group of tribal tongues consists of those which are here classed as Gipsy languages. They are the speeches of wandering clans who employ, mainly for professional purposes, dialects different from that of the tract over which they may possibly have wandered for generations. These tribal tongues may be real languages, such as the Aryan Labhānī and the Dravidian Yerukala, or may be *argots* in which local words are distorted into a slang like what we find in the "Latin" patter of London thieves.

Finally, there is another class of tribal dialects in which a clan has migrated to a new seat, and has gradually developed a new language, based on that of its former home, but corrupted and mixed with that of the people amongst whom its new lot is cast. It is evident that if part of a Rajputana tribe migrates to a country of which Bundēlī is the vernacular, while another wends its way to a district in which Marāthī is spoken, the resultant languages spoken by the two groups of the same tribe will be very different, although both are based on Rājasthānī. Such has actually occurred in several instances in the Central Provinces, and there are also in other parts of India many cases of immigrant tribes who have preserved their language in a more or less corrupted form. Perhaps the most striking example is a colony of speakers of corrupt Sindhī, who live in the upper Gangetic Doab.

373. The identification of the boundaries of a language, or even of a language itself, is not always an easy matter. As a rule, unless they are separated by great ethnic differences, or by some natural obstacle, such as a range of mountains or a large river, Indian languages gradually merge into each other,

Tribal
DialectsIdentifica-
tion and
nomenclature
of Indian
languages

and are not separated by hard and fast boundary lines. When such boundaries are spoken of, or are shown on a map, they must always be understood as conventional methods of showing a state of things that does not really exist. It must be remembered that on each side of the conventional line there is a border tract of greater or less extent, the language of which may be classed at will with one or other. Here we often find that two different observers report different conditions as existing in one and the same area, although both are right. For instance, the census places the north-western frontier of Bengali some twenty or thirty miles to the east of that fixed by the Linguistic Survey, and I no more maintain that the survey figures are right than that the census figures are wrong. From one point of view both are right, and from another both are wrong. It is a mere question of personal equation.

Having fixed the locality of our language, it is by no means easy to get at its name. As a rule, in Northern India natives do not grasp the idea connoted by the word "language." They understand that connoted by "dialect" readily enough, but their minds are not trained to grasp the conception, so familiar to us, of a general term embracing a number of interconnected dialects. It is as if we in England spoke of "Somersetshire" and "Yorkshire" dialects but never used the term "English Language." Moreover, the average native rarely knows the name of his own dialect, though he can recognise without difficulty the dialect spoken by a stranger. A man of Oudh may be unaware that he himself speaks Awadhī, though he will say at once that A speaks Bhojpuri, and that B speaks Braj Bhāshā. Again, many dialect titles are of the nature of nicknames, such as *Jangalī*, the language of the forest boor, or *Rāthī*, that of the ruthless ones. *Jangalī*, for instance, is a well-known name of the language of a certain tract in the Punjab, but when you go into the tract and ask for *Jangalī* speakers, you are assured that it is not to be found there, but is the speech of the fellow a little further on. You go further on and get the same reply, the language receding like a Will-o-the-Wisp at each step of your progress. From all this it follows that, in Northern India, the language-names have generally been invented by the English, while the dialect-names have been obtained, not from the speakers, but from "the fellow" who is not "a little further on."

General
arrangement
of Chapter

374 In the following account of the vernacular languages of India I have arranged them in the order of antiquity, putting, so far as was possible, the languages which it is probable are the oldest languages of India first, and then those of later immigrants. I hence commence with the Selungs of the Mergui Archipelago, who, ethnologists believe, are perhaps the remains of the earliest inhabitants of Further India. Then the Indo-Chinese, on account of the antiquity of the Mōn-Khmērs; next the Dravido-Mundā languages, as the Mundā languages appear to be as old as the last-named; and lastly the Aryan forms of speech. Finally I mention a few languages which have as yet defied classification, and the languages of countries outside India, but which are spoken there by immigrants, temporary or otherwise, and are not vernaculars of the country.

MALAYO-POLYNESIAN FAMILY.

The Malay Group.

Selung

375. The only representatives of this family which are vernaculars of

Language	Population returning it
Javanese	1
Malay	2,460
Selung	1,318
Nicobarese	6,513
TOTAL, Malay Family	10,292

British India are Selung or, as the Burmese call it, Selon, and Nicobarese. Malay and Javanese are also reported, but they are spoken by foreigners. The Selungs are a tribe of sea-gipsies inhabiting the islands of the Mergui Archipelago and the adjacent parts of the Malay Peninsula. Their language would not present many points of interest did it not afford a clue to ethnologists. It is most nearly related to the Cham or Tiam spoken by the aborigines of Cambodia, and these two are the only languages of the family which belong to the main-

land of Asia excluding the Malay Peninsula. In some particulars they show points of agreement with the language of the Philippines, but in other respects

they have struck out lines for themselves and must be considered to be entirely independent forms of speech, although in later times they have been subjected to the influence of Malay and of the other dialects spoken in their neighbourhoods. Their independent character renders it improbable that they are importations from Malacca or the Indian Archipelago, and both their peculiar characteristics, and the persistent traditions of the people who speak them, point to the probability that they are relics of the language of a nation which was settled in very early times on the continent of Further India. This may assist ethnologists in determining the original home of the Malay nationalities

876. The dialects of the Nicobars are all closely connected with Malay. They ^{Nicobarese} contain few borrowed vocables, and are rich in specialised words for actions and concrete ideas, but poor in generic and abstract terms. Their main peculiarity is the custom of employing infixes to modify the meaning of a primitive word. They have been studied since the commencement of the eighteenth century, and the Gospels have been translated into Central Nicobarese by the Moravian Missionaries (1768—1787). The best known modern authorities are the works of Man and De Roepstorff. We shall see, when dealing with the Môn-Khmêr languages, that although they belong to a linguistic family altogether different from that under which Nicobarese must be classed, both groups of speeches, as well as the members of the Mundâ tongues of the continent of India, possess a common substratum which suggests interesting ethnological problems. Colonel Sir Richard Temple has written a very full account of the language in the Andaman report for this Census. He prefers to class it under the Môn-Khmêr family.

THE INDO-CHINESE FAMILY.

377. I suppose that no great family of speeches, not even the Indo-European,

Sub-Family	Population returning it
Môn-Khmêr . . .	427,760
Tibeto-Burman . . .	9,660,454
Siamese-Chinese . . .	1,724,085
TOTAL, Indo-Chinese .	11,712,299

is spoken over so wide an extent of country—from Central Asia to the Malay Peninsula, and from Baltistan to Peking—or by so many millions of people, as that formless, ever-moving, ant-horde of dialects, the Indo-Chinese. So vast is the area covered by it, and so apparently infinite is the number of its members, that no single scholar can hope to master them in their entirety. A few of them, such as Tibetan, Burmese, or Chinese, have been more or less thoroughly investigated by

specialists; of others we have only a few words, single bricks, each of which we have to take as a specimen of an entire house; while of others, again, we only know the names, or not even that.

378. The first attempts at classifying this mass of languages were made by ^{Early in-} Brian Houghton Hodgson, *clarum et venerabile nomen*, and his works still form the foundation of all similar undertakings. Closely following Hodgson came the enthusiastic and indefatigable Logan, to whom we are indebted for much that relates to Burma and Assam. After him we find several writers, some, like Mason, Cushing, Forbes, or Edkins, armed with a practical mastery of a portion of the field, and adding new facts to our knowledge, and others, trained philologists like Max Müller, Friedrich Müller, or Terrien de Lacouperie, who examined the materials collected by the former, and did something towards reducing order out of chaos. Such was the condition of affairs in 1891, at the time of the last census. Since then considerable progress has been made

379. European scholars, among whom may be mentioned Professor E. Kuhn ^{Latest} of Munich and Professor Conrady of Leipzig, have put together a framework of ^{investiga-} classification which is generally accepted as correct by scholars who are in a position to judge its value. They have even succeeded in formulating phonetic laws which bridge over the difference between what are apparently the most widely separated languages, and in suggesting a most plausible theory to account for the origin of the tones which are so characteristic of these forms of speech. Their conclusions have been remarkably confirmed by the new facts lately brought to light through the publication of the *Gazetteer of Upper Burma*.

380. If there is one principle which is universally accepted in comparative ^{Principles} philology, it is that languages must be classed according to their grammars. ^{of classifi-} cation.

Vocabulary alone is but an untrustworthy guide. If we judged by vocabulary, the Latinised English of Dr. Johnson would have to be recorded as a Romance language, and Urdū as a Semitic or Eranian one, whereas everyone knows that English is really Teutonic, and Urdū Indo-Aryan. The rule applies admirably to languages like Sanskrit or Latin or English, which *have* grammars, but what are we to do when we come to deal with languages which to our Aryan ideas have no grammar at all,—forms of speech which make no distinction between noun, or adjective, or verb, which have no inflexions or hardly any, and which are entirely composed of monosyllables that never change their forms? According to the *Century Dictionary*, grammar is “a systematic account of the usages of a language, as regards especially the parts of speech it distinguishes, the forms and uses of inflected words, and the combinations of words into sentences.” Hence, to answer the above question, we must either abandon our principle or enlarge our conception of grammar by omitting the word “inflected” from the definition. We are thus thrown back upon the forms and uses of words generally; that is to say, we are compelled to lay more stress upon a comparison of vocabularies, and, as will be seen subsequently, this will really bring us back to our principle. Indo-Chinese languages, like the Buddhists who speak them, have passed through many births. They, too, are under the sway of *karma*. The latest investigations have shown that in former existences they were inflected, with all the familiar panoply of prefix and suffix, and that these long dead accretions are still influencing each word in their vocabularies in its form, its pronunciation, and even the position which it now occupies in a sentence. The history of an Indo-Chinese word may be compared to the fate of a number of exactly similar stones which a man threw into the sea at several places along the shore. One fell into a calm pool, and remained unchanged; another received a coating of mud, which, in the course of centuries, itself became a hard outer covering entirely concealing what was within; another fell among rocks in a stormy channel, and was knocked about and chipped and worn away by continual attrition till only a geologist could identify it; another was burrowed into by the pholas till it became a caricature of its former self; another was overgrown by limpets, and then was so worn away and ill-treated by the rude waves that, like the grin of Alice’s Cheshire cat, all that remained was the merest trace clinging to the shell of its whilom guest.

Laborious and patient analysis has enabled scholars to trace the fate of some vocables through all their different vicissitudes. For instance, no two words can apparently be so different as *rang* and *ma*, both of which mean “horse,” and yet we can trace the derivation of the latter from the former, although all that has remained of the original *rang* in the Chinese *ma* is the tone of voice in which the latter is pronounced!

381. Tradition and comparative philology agree in pointing to North-Western China, between the upper courses of the Yang-tse-kiang and of the Ho-ang-ho, as the original home of the Indo-Chinese race.*

Further India and Assam have been populated by successive waves of Indo-Chinese invaders, each advancing in turn down the courses of one or more of the principal streams, the Brahmaputra, the Chindwin, the Irrawaddy, the Salwin, the Mé-nām, and the Mé-khong, and driving its predecessors nearer to the sea-coast, or into the mountain fastnesses which overlook the valleys. Philology, moreover, teaches us that the earliest immigrants must have found another race already settled there, concerning whom little definite is known. It is probable that its members were of the same stock as the progenitors of the great Mundā race, and also of some of the tribes which are now found on the Australian continent.

382. The first Indo-Chinese to invade the territory were the ancestors of the Mōn-Khmērs, whom we now find driven to the south coast of the peninsula, or surviving, as Khassis, Palaungs, or Was, in the hill country further north, but who must once have occupied a large area, if not the whole, of what is now Assam and Indo-China. Anam, Cambodia, and Tenasserim are the coast strongholds of languages of the race at the present day, and from the last-named locality they have in comparatively recent times moved north into the lately-formed delta of the Irrawaddy and have occupied Pegu.

Original
home.

Mōn-
Khmērs

* See E. Kuhn, *Ueber Herkunft und Sprache der transjapanischen Völker*, pp. 4 and 8.

383. The Tibeto-Burmans appear to have migrated in later times westwards from the same original seat towards the head-waters of the Irrawaddy and the Chindwin. Thence some followed the upper course of the Brahmaputra, the Sanpo, north of the Himalayas, and peopled Tibet. A few of these crossed the watershed and occupied the hills on the southern side of the range, where they met and mingled with others of the same family who had wandered along the lower Brahmaputra through the Assam Valley. At the great bend of the river, near the present town of Dhubri, these last followed it to the south, and occupied first the Garo Hills, and then what is now the State of Hill Tippera. Others of these appear to have ascended the valley of the Kapili and the neighbouring streams into the hill country of North Cachar, but the mountainous tract between it and the Garo Hills, now known as the Khasi and Jaintia Hills, they failed to occupy, and it still remains a home of the ancient Mōn-Khmēr speech. Other members of this Tibeto-Burman horde halted at the head of the Assam Valley and turned south. They took possession of the Naga Hills, and became the ancestors of that confused sample-bag of tribes, whose speeches we call for convenience the Nāgā group. Some of these probably entered the Eastern Nāgā country directly, but others entered the Western Nāgā country from the south *via* Manipur, and there are signs of this northern movement still going on even at the present day. Other members remained round the head-waters of the Irrawaddy and the Chindwin, where Kachin is now spoken, and there became a nursery for further emigrations. One of the earliest of these must have been into Manipur, where they settled, for the Meithei language there spoken shows not only points of agreement with that spoken at the present day in its original home, but also with those of all the other emigrants. Another of these swarms settled in the upper basins of the Irrawaddy and the Chindwin, and gradually advanced down the courses of those streams, driving before themselves, or absorbing, or leaving untouched in the highlands, their predecessors the Mōn-Khmērs. Before their language had time to materially change from the form of speech spoken in the home they had left, branches of these turned westwards and settled in the Chin Hills, south of Manipur.* There they increased and multiplied, till, driven by the pressure of population, they retraced their steps northwards in wave after wave along the hills, leaving colonies in Lushai Land, Cachar, and even amongst their cousins of Manipur and their more distant relations of the Naga Hills. Their descendants speak some thirty languages, all different yet all closely connected, and classed together with Meithei as forming the Kuki-Chin group. The main branch of the southward moving swarm, the ancestors of the modern Burmese, continued to follow its line of march along the rivers, till it ultimately occupied the whole of the lower country, and founded the capitals of Pagan and Prome. Finally, in quite modern times, another migration of the Kachins has pressed towards the south, and their progress has only been stopped by our occupation of Upper Burma. That there is complete historical evidence for all that precedes cannot be pretended. Much of it deals with prehistoric times. All that I have endeavoured to do is to present the opinions which I have based on a comparison of local traditions with the facts presented by ethnology and philology. It must be confessed that some of the steps have been taken with hesitation and upon doubtful ground.

384. We are treading on firmer soil when we approach the third and last great invasion, that of the speakers of the Siamese-Chinese languages, although we are unable to fix the time and circumstances of the entry of one branch of them,—the Karens. All that we can say about the Karen language is that it is a pre-Chinese one, and that it must provisionally be classed in this family, the other branches of which are the Chinese and the Tai or Shām. With the Chinese we have nothing to do. The Tais first appeared in history in Yun-nan, and from thence they migrated into Upper Burma. The earliest swarms appear to have entered that tract about two thousand years ago, and were small in number. Later and more important invasions were undoubtedly due to the pressure of the Chinese. A great wave of Tai migration descended in the sixth century of our era from the mountains of southern Yun-nan into the valley of the Shweli and the adjacent regions, and through it that valley became the centre

* Another possible view is that these Chin tribes branched off not from the Burmese invaders but from the Meitheis who had settled in the Manipur Valley. Linguistic evidence, however, points to the account given above as the most probable statement of the facts.

of their political power. Early in the thirteenth century their capital was fixed at the present Mung Mau. From the Shweli the Tai or Shām, or (as the Burmese called them) Shān, spread south-east over the present Shān States, north into the present Khām-ti region, and west of the Irrawaddy into all the country lying between it, the Chindwin, and Assam. In the thirteenth century, one of their tribes, the Ahoms, overran and conquered Assam itself, giving their name to that country. Not only does tradition assert that these Shāns of Upper Burma are the oldest members of the Tai family, but they are always spoken of by the other branches as the *Tai Long*, or Great Tai, while these others call themselves the *Tai Noi* or Little Tai.

These earliest settlers and other parties from Yün-nan gradually pressed southwards, driving before them, as the Tibeto-Burmans had done in the valley of the Irrawaddy, their cousins the Mōn-Khmērs, but the process was a slow one. It was not until the fourteenth century of our era that the Siamese Tai established themselves in the great delta of the Mé-nām, and formed a wedge of Tai-speaking people between the Mōn-Khmērs of Tenasserim and those of Cambodia. The word "Siam" is but a corruption of "Shām."

The Shāns of Upper Burma were not so fortunate. Their power reached its zenith in the closing years of the thirteenth century, and thereafter gradually decayed. The Siamese and Lao dependencies became a separate kingdom under the suzerainty of Ayuthia, the old capital of Siam. Wars with Burma and the Chinese were frequent, and the invasions of the latter caused great loss. The last of the Shān States, Mogaung, was conquered by the Burmese king Alomphra in the middle of the eighteenth century, but by the commencement of the seventeenth century Shān history had already merged into that of Burma, and the Shān principalities, though they were always restive and given to frequent rebellions and to intestine wars, never succeeded in throwing off the yoke of the Burmans.

Summary.

385. To sum up the history of the Indo-Chinese languages so far as it relates to India. The earliest Indo-Chinese inhabitants of Further India, including Assam, were Mōn-Khmērs. Subsequent invasions of Tibeto-Burmans have thrust them down to the seaboard, leaving a few waifs and strays in the highlands of their old homes. Of the Tibeto-Burman stock, one branch entered Tibet, some of whose members crossed the Himalayas, and settled on the southern slopes of that range. Others followed the course of the Brahmaputra, and even occupied the Garo Hills and Tippera. Others made their homes in the Naga Hills, the Valley of Manipur, and the head-waters of the Chindwin and Irrawaddy. From the last named region a tribe made its course south, leaving a colony *en route* in the Chin Hills, whence, again, a backwash has appeared in Lushai Land, Cachar, and the neighbourhood, in modern times. The rest of the tribe gradually forced its way down the valley of the Irrawaddy, where it settled and founded a comparatively stable kingdom. Finally, a third swarm, the Tai, conquered the mountainous country to the east of Upper Burma, and spread north and west among, but not conquering, the Tibeto-Burman Kachins of the upper country. They also spread south, and occupied the Mōn-Khmēr country between them and the sea, and their most important members now occupy a strip of territory running north and south, with Burmese and, lower down, Mōn speakers on their west, and Chinese and Mōn-Khmēr languages on their east.

General characteristics of the Indo-Chinese languages Isolating languages.

386. Indo-Chinese languages exhibit two of the three well-known divisions of human speech, — the isolating, the agglutinative, and the inflected. From this list it is not to be assumed that an isolating language is necessarily in the earliest stages of its development. All Indo-Chinese languages were once agglutinative, but some of them, Chinese for instance, are now isolating; that is to say, the old prefixes and suffixes have been worn away and have lost their significance; every word, whether it once had prefix or suffix, or both, or not, is now a monosyllable; and, if it is desired to modify it in respect to time, place, or relation, this is not done by again adding a new prefix or a new suffix, but by compounding with it, *i.e.*, simply adding to it, some new word which has a meaning of its own, and is not incorporated with the main word in any way. For example, the Chinese word indicating the idea of "going" is *keu*, and that indicating the idea of "completion" is *leau*, and if a Chinaman wishes to convey the idea of "he went," he says "he going completion," *ta keu leau*. Even in Chinese, some of these subsidiary words which modify the meaning of

the principal one have lost their significance as separate vocables, and only continue in existence as prefixes or suffixes. This brings us to the agglutinating stage of language, in which sentences are built up of words united to formal parts, prefixes, suffixes, or infixes, which denote the relationship of each to the other members of the phrase. The differences, in kind and degree, between the various agglutinating languages are very great; the variety ranges from a scantiness hardly superior to Chinese isolation, up to an intricacy which is almost incredible. Agglutinating languages

We may take the Tai language as examples of forms of speech in which the agglutinative principle is showing signs of superseding the isolating one, while in the Tibeto-Burman family it has practically done so, and but few of the suffixes are capable of being used as words with independent meanings. They are agglutinative languages almost in the full sense of the term. There is one more stage which we meet but rarely, and even then in sporadic instances, in Indo-Chinese languages. In it the words used as affixes have not only lost their original meaning, but have become so incorporated with the main word which they serve to modify, that they have become one word with it, and the two are no longer capable of identification as separate words except by a process of analysis. Moreover, the root word itself becomes liable to alteration. This stage is known as the inflectional, and Sanskrit and the other Indo-European languages offer familiar examples of it. Inflecting languages

387. Before proceeding further, it will be useful to quote the following general observations which were made by the late Professor Friedrich Muller of Vienna in his great work on comparative philology: Expression of abstract and concrete ideas

"The manner in which primitive conceptions are formed is of the greatest importance in influencing the further development of a language as a medium for expressing human thought. Things may be conceived in their concrete entirety, or they may be subdivided into their different components, which are then classified according to certain characteristics, and conceived as more abstract ideas. In the former case the language does not proceed further than to intuition; in the latter it develops abstract conceptions and ideas."

"The languages belonging to the former class are, it is true, very picturesque and poetical, possessing an extraordinary large stock of concrete and characteristic terms for individual things; but they are quite unfitted for acting as mediums of higher thought, not being able to denote abstract ideas free from all accidental properties. This linguistic tendency, in its turn, influences the mind, so that it becomes unable to perform the higher acts of thinking by means of abstract ideas."

"There are many languages which possess words to denote the varieties of different animals, but have got no word for animal. They are able to distinguish the various modes of sitting by means of distinct picturesque terms, but the simple idea 'to sit' cannot find expression. Such languages have no proper comprehension of form, and are quite unfit for the classification and combination of ideas. The principal reason is that they do not possess particles, that is, words with a wider meaning, which support the act of thinking like algebraic formulas. When such languages are forced into modern conceptions, as, for instance, in translating the Bible, they are at once overcome by the substance; they conceive as substance what we conceive as form."

"The deficiency of such languages is, to no small extent, due to the fact that they do not possess a real verb, the whole expression starting from substantival conceptions."*

All the Indo-Chinese languages once belonged to the class just described, although some of those which have developed a literature, like Chinese, Siamese, and Tibetan, have overcome the difficulty of not possessing a real verb, and are

* It would be more correct to say that these languages possess neither noun nor verb, but a "something" which is neither noun nor verb, and which can be used for both. There is no word in English capable of denoting exactly what this indefinite "something" is, and the use by Muller of terms borrowed from European grammatical terminology has misled more than one scholar.

now able to express abstract ideas. But most of those with which we are now concerned, and especially the Tibeto-Burman ones, are still in the stage of being only able to easily express concrete ideas. Many of them, for instance, do not possess a general term for so simple an idea as "man," but have to use their own tribal name instead. They can speak of an Englishman, a Singpho, a Mändö or Gārō, and an Arleng or Mikir, but they have no word for "man" in the abstract. Again, Lushēi has nine or ten words, at least, for different kinds of ants, but no word for "ant" generally.

The words denoting relationship and parts of the body are the results of an abstraction. A father in the abstract, who is not the father of any particular individual, is an idea which requires a certain amount of reflection; and such words are, accordingly, hardly ever used alone in the Tibeto-Burman languages, but are (with few exceptions) always preceded by a possessive pronoun, or a noun in the genitive case. We find "my father," "thy mother," "his hand;" but "father," "mother," and "hand" are not used by themselves. Most Tibeto-Burmans would be sadly put to it to translate literally such a sentence as "the hand possesses five fingers." The possessive pronoun of the third person occurs, of course, much more frequently than those of the first and second persons, and it has in several languages lost its proper meaning, and has become a bare meaningless prefix, used with all nouns when they are employed in an abstract sense. I have referred to this process in some detail, as it well illustrates how, as the need for the use of abstract nouns grew with the progress of civilisation, it has been supplied in a very simple way in a large class of languages. We have evidence of every stage of the process, and we meet instances of it in tracts so wide apart as the Hindū Kush and the Chin Hills.*

Similarly, the Indo-Chinese verb has grown out of a noun,—another example of the development of the abstract from the concrete. The simplest Tibeto-Burman form of "I go" is the concrete idea of "my going." "I went" is "my-going completion," and on this system has grown the entire conjugation of the neuter verb which we find in Tibeto-Burman grammars. On the other hand, "I beat him" is "by-me his beating," which we at once see can represent either an active (I beat him), or a passive (he is beaten by me) expression. This explains the statement we so often see that these languages possess no passive. They have no voice at all, either active or passive, because they have no real verbs.

388. A brief notice is here demanded regarding the tones which form so characteristic a feature of most Indo-Chinese languages. So characteristic are they, that some writers have proposed to group all these forms of speech as "polytonic languages," a classification which is false, first, because some Indo-Chinese languages possess only one tone, and, secondly, because where more exist they are not an essential but an accidental characteristic of the languages. The number of tones in any one Indo-Chinese language varies from eight in Mandarin Chinese to two or three in Burmese and only one in Western Tibetan. A tone is a musical note. It may be low or high in pitch, or it may be a glide from a higher to a lower note or *vice versa*. But a musical note is characterised not only by its pitch;—it also varies according to the period of time during which its sound is continued. There is a great difference between a semibreve and a quaver. So, also, in tones, there is a cross-division, according as the words to which they are applied are pronounced fully or abruptly. We may quote an example from English, where the "no" of peremptory refusal is spoken in the "abrupt" or "entering" tone, while the "no" of ordinary conversation is pronounced much longer. We may, therefore, divide the tones of Indo-Chinese languages into two classes, pitch-tones and time-tones, with the proviso that the two may be combined. Lepsius long ago suggested, and Professor Conrady has lately brilliantly proved, that these pitch-tones are due to the disappearance of prefixes. In a dissyllabic word composed of a prefix *plus* a root, the accent was strongly on the root. The natural tendency was for the unaccented prefix to gradually wear away, and, instead of the accent, which, as the word was now a monosyllable again could no longer exist, the pitch-tone was given to the word as a kind of compensation, indicating the former existence of the disappeared

* All agglutinative languages do not form abstract nouns in this way. For instance, in some Melanesian speeches, in which a similar state of affairs exists, a special termination is employed which gives a purely abstract meaning.

prefix. It follows that where prefixes are still used there is the less necessity for tones. Thus, Chinese and Siamese, which have no prefixes, have many, while Burmese, which uses prefixes more freely, has only two or three. In the Indo-Chinese languages of Assam and Upper Burma, which like Burmese are purely agglutinative languages, we notice a similar poverty of tones. We rarely hear of more than one or two, although it must be confessed that, owing to the lack of trained observers on the spot, our information on the subject is scanty.

The question is different in regard to time-tones. The abruptness with which a word is pronounced strikes at once the most uneducated hearer, and in many cases the various observers have represented it very naturally by the letter *h* attached to the vowel which is so pronounced. Thus, in Khassi, the word *la* is pronounced fully and is the particle indicating past time, while the word *lah* is pronounced abruptly and indicates potentiality. The origin of this time-tone is not due to the disappearance of a prefix. The subject has not yet been thoroughly studied, but so far as the Assam-Burma languages are concerned it appears to be certainly caused by the elision of a hard final consonant. We see this clearly in words like the Lushēi *mit*, an eye, which becomes *mhi* in Angāmi Nāgā, and *mih* in Kachin, both with the abrupt tone. So also in many other cases.

389. The order of words is not a distinguishing feature of the Indo-Chinese languages as a whole. There must once have been a time when this order was not fixed as it is at present. With the disappearance of prefixes and suffixes the want was felt of some method for defining the relation which each word bore to its neighbour in a sentence. This was partly done by fixing its position, but the different families did not all adopt the same system. The Siamese-Chinese and the Mōn-Khmēr families adopted the order of subject, verb, object, with the adjective following the noun qualified, while in the Tibeto-Burman family, we have subject, object, verb, and the adjective usually, but not always, following the noun. Again, in the Tai and Mōn-Khmēr sub-families and in Nicobarese, the genitive case follows the noun by which it is governed, while in Tibeto-Burman and Chinese it precedes it. This order of words is an important criterion in judging of the relationship of these families with other branches of human speech, such as the Dravidian or Mundā ones, with which comparison has more than once been made.

Order of words.

The Mōn-Khmēr Sub-Family.

390. This family (often called the Mōn-Anam), of which but few speakers were recorded at the Census of 1891, now demands fuller treatment, both on account of the increased number of people who have been discovered to speak some form or other of it, and on account of its importance for the purposes of ethnological enquiry. Thanks to the labours of Professor E. Kuhn, we know that the Khassi of Central Assam, which has hitherto been looked upon as an isolated form of speech, belongs to it. Mōn of Pegu, the Khmēr of Cambodia, the Anamese of Cochin China, and numerous other dialects spoken along the lower and middle course of the Mé-khong are also members. Closely connected with these last are the Palaung and Wa, with other minor dialects spoken in Upper Burma to the north-west of Mandalay. Almost everywhere it presents the same appearance, that of a once powerful and widely-extended language which has been superseded, or is in course of supersession, by others. In Assam the superseders have been the Tibeto-Burman tongues, which, in their turn, are being gradually ousted by the Aryan Assamese. Only in the strongholds of the Khasi and Jaintia Hills has an island of Mōn-Khmēr speech survived. In Burma, Karēn and Burmese, belonging to two widely different stems of the same Indo-Chinese family, have driven Mōn or Talaing down to the seaboard province of Pegu, only Palaung remaining as a waif in Loi Long, the State of "the Great Mountain," and its near relation the Wa in the hill country between the Salwin and the Mé-khong. The speech is fairly preserved in the inhospitable hills along the course of the Mé-khong, till we arrive at Cambodia where, in the

In Further India.

In Assam.

In Burma.

Language.	Population returning it.
Mōn	174,510
Palaung	67,756
Wa	7,667
Khassi	177,827
TOTAL, Mōn-Khmēr Sub-Family	427,760

form of Khmër, it still survives as an acknowledged national tongue. Siamese has driven it from Siam, and, in Cochin China, we see the Anamese in the actual course of supersession by Chinese.

Connexion
with Mundā,
Nicobar, and
Malacca
languages.

391. The resemblances between the Mön-Khmër vocabularies and those, on the one hand, of the Mundā languages, and, on the other hand, of Nicobar and the Malacca dialects, have often been pointed out. These are so remarkable and of such frequent occurrence that a connexion between all these tongues cannot be doubted. At the same time the structures of the two speeches differ in important particulars. The Mön-Khmër languages are monosyllabic. The others are polysyllabic. The order of words in a sentence is different, and, as the order of words follows the order of the thoughts of the speakers, it follows that Mön-Khmër people think in an order of ideas different from that of the others. It is not, therefore, safe to assume a common origin for these two sets of languages. It is certain, however, that there is at the bottom of all of them a common substratum over which there have settled layers of the speeches of other peoples, differing in different localities. This substratum was firmly enough established to prevent its being entirely hidden by them, and frequent undeniable traces of it are still discernible in languages spoken in Nearer and Further India. It is possible, too, that Anamese itself represents a reversed condition of affairs, and that it does not properly belong to the Mön-Khmër family, but fell under its influence in later times, just as it is now falling under that of Chinese.

Connexion
with Aus-
tralia

The Mundā languages at the present day stretch right across the centre of continental India, from Murshidabad on the east to Nimār on the west, and we have seen that it is probable that the Mön-Khmër languages once covered the greater part of Further India and of the present province of Assam. What the substratum was which was common to the two families of speech we are not yet in a position to say. It may have been Mön-Khmër, or it may have been Mundā, or, again, it may have been a language different from both. Recent researches, in which Professor Thomsen, of Copenhagen, has taken a leading part, tend to show that it is the second alternative which is more probably the true one, and that a form of speech from which the present Mundā languages are descended has once been spoken, whether contemporaneously or at different times we cannot say, over the greater part of the Indian continent, over Further India, and even over the Archipelago and in Australia. We cannot, in the present state of our knowledge, tell whether this common language arrived in Further India from the north, or whether it arrived by sea and gradually worked upwards. It is, however, worth noting that the same tradition as to the advent of a prince from across the Bay of Bengal is current in Anam and Cambodia as well as in Pegu.

Palaung
a Mön-
Khmër
dialect.

Objections have been raised to the inclusion of Palaung and its cognate dialects in this family, on the ground that it has little resemblance to the Mön of Pegu. No one ever said it had; but the Mön-Khmër family is a large one, and includes several subordinate groups of tongues, to one of which belongs Mön, while Palaung and the others belong to an entirely different one.

Mön

392. The languages of this family which are spoken in British India are the Mön or Talaing; Palaung, Wa, and their cognate dialects; and Khasi. Mön is now only spoken in Pegu and the other coast districts round the Gulf of Martaban. During the later days of Burmese rule its use was proscribed, but since then it has shown distinct signs of revival. It belongs to the same group of the languages of the family as Anamese, together with a number of other petty dialects spoken in Anam. It is curious that two such widely separated languages should be so closely connected. Between them lie, not only Siamese, but the cognate though very different Khmër dialects of Cambodia.

Palaung-Wa
group

393. Palaung and Wa are the chief representatives of several dialects spoken on the upper middle course of the Mé-khong, principally on its right bank. They are the only important members in British territory, though a few stragglers speaking Khamu, Lemet, En, Riang, and other less known dialects are also found. Possibly Danaw, which is usually, and in this chapter, considered to be a corrupt form of Karen, also belongs to this group.

Khasi

394. Khasi, with its three dialects of Synteng, Lyngngam, and Wār, in addition to the standard form of speech, is another island of Mön-Khmër speech left untouched in the Khasi and Jaintia Hills, in the midst of an ocean of Tibeto-

Burman languages. Logan was the first to suggest, and Professor Kuhn has since conclusively shown, that it and the Mön languages belong to a common stock. The resemblances in the vocabularies of Khassi and of the dialects of the Palaung-Wa group settle the question. But the resemblance is not only one of vocabulary. The construction of the Mön and of the Khassi sentence is the same. The various component parts are put in the same order. The order of thought is the same. Khassi forms a separate branch of the sub-family to which it belongs, in that it employs the so-called articles, which are wanting in the other members of the family, and has grammatical gender. Here we must leave the matter in the hands of ethnologists. It will be interesting to see if any connexion of tribal customs can be traced, and if the Möns or Palaungs still retain survivals of the matriarchal state of society which is so characteristic of the Khassis. The Palaungs, at any rate, trace their origin to a princess, and not to a prince.

Tibeto-Burman Sub-Family.

395. We have already seen how the great Tibeto-Burman family first of all split into two branches, one entering Tibet along the

Branch	Population returning it
Tibeto-Himalayan	425,814
North Assam	41,731
Assam-Burmese	9,092,909
TOTAL, Tibeto-Burman Sub Family	9,560,454

course of the Sanpo, as the upper waters of the Brahmaputra are named, and the other remaining on the south side of the Himalayas to populate Assam and Burma. So early an ethnical division naturally leads us to expect a corresponding division of languages, and such indeed is partly the case. Philologists have hitherto divided the Tibeto-Burman family of languages into two main branches, the Tibeto-Himalayan and the Assam-Burmese.

To these must be added a third, miscellaneous, group, which we may call, for the sake of convenience, the North Assam branch. The languages which form this last are spoken on the southern face of the Himalayas extending from Towang eastwards. They occupy an intermediate philological position between the other two branches, and are spoken by tribes whose ancestors appear to have migrated thither independently, and at different times, from the original home of the Tibeto-Burman race.

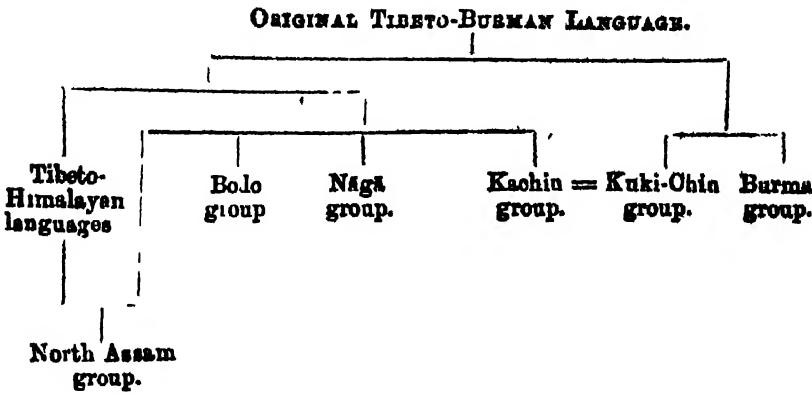
Tibeto-Himalayan and Assam-Burmese branches. North Assam branch

396. This division of the Tibeto-Burman languages is not, however, nearly so simple as it seems. The examination of all the Tibeto-Burman languages by the Linguistic Survey is not yet finished. Pending its completion I have not ventured to disturb the conventional arrangement into two main branches, except by adding the third, intermediate, North Assam branch, which was rendered necessary by the facts of the case. This arrangement is a convenient one, and has geographical and ethnical bases for which a good deal can be said. Moreover, any revised classification would require reconsideration on the completion of the Linguistic Survey. I may, however, give the following more detailed provisional classification of the Tibeto-Burman languages as a whole, to illustrate what at the present time I believe to be their mutual relationship. It must be understood that it is the conventional, and not the following, arrangement which is adhered to in these pages.

Mutual relationship of the three branches.

It appears from such a detailed examination of the Tibeto-Burman languages (mainly those of Assam and Burma) as we have been able to make that they fall into two main branches, one including not only the Tibeto-Himalayan languages, but also those falling under the Bodo, Nāgā, and Kachin groups of the Assam-Burmese languages. The other branch is composed of the Kuki-Chin and Burmese groups of the Assam-Burmese languages. The first branch falls into two sub-branches, consisting on the one side of the Tibeto-Himalayan languages, and, on the other side, of the Bodo, Nāgā, and Kachin languages. Between these two sub-branches lies the group of North Assam languages, which is related to both. On the other hand, the Kachin group is not only related to the Tibeto-Himalayan branch, but also shows points of contact with the Kuki Chin languages, so that (although more closely related to Tibeto-Himalayan) it is an intermediate group between the two branches. This is what we should expect from the ethnic history of its speakers, for the Kachins still occupy what was approximately the original home of the Tibeto-Burman race before the

parting of the ways occurred. The mutual relationship of all these languages may be graphically represented by the following table : —



TIBETO-HIMALAYAN BRANCH.

397. The members of the Tibeto-Himalayan branch of the Tibeto-Burman

Grouping of
the
languages

Language	Population returning it.
Bhotiā	235,399
Lāhuli	9,513
Kanāwari	19,525
Kāni	11
Blānū	15
Padhi	268
Hāyu	114
Kuanti (Khambu)	43,954
(Yākā)	1,366
(Others)	64
Gurung	7,481
Mangar	18,476
Sunuwār	5,265
Thāma	319
Newāri	7,873
Murmi	32,167
Mānjhi	902
Lamā	23,200
Rong	19,291
Dhimāl	611
TOTAL, Tibeto-Himalayan languages	425,814

Bhotiā.

languages with which the Census of India has to deal are mainly those of which the speakers have crossed the watershed of the Himalaya, and have settled on the southern slopes of that range. These languages have as yet hardly been touched by the Linguistic Survey, and pending the collection and arrangement of further materials, the merest sketch must suffice. I shall not attempt to group them on philological principles, but give the arrangement based on purely geographical considerations, which has hitherto been customary.

398. The main language is that which Europeans call Tibetan, its speakers Pho-ke, and natives of India Bhōtiā. A language so well known requires but a short notice on the present occasion, the more so because it can hardly be called a vernacular of any large tract in British India. The name "Tibetan" does not exactly connote all the forms of speech which are included in "Bhōtiā," and the latter is the more accurate name. "Tibetan" only refers to the language of Tibet, including Ladākh. But the language of which the Tibetan of Lhasa is the

standard extends over a wider area than this. It is spoken in parts of Nepal, in Bhotan, and by the ruling tribes of Sikkim. These are all called Bhōtiā, but are not (according to the accepted meaning of the word) Tibetan. To

Bhōtiā of
Tibet or
Tibetan.

Dialect	Population returning it.
Tibetan	14,812
Balti	130,678
Ladākhī	90
Shar pā	4,407
Dēnjong-kē	8,825
Lhō-kē	40,765
Others	35,822
TOTAL, Bhōtiā	235,399

save confusion it is therefore best to speak of one Bhōtiā language, of which Tibetan, or Bhōtiā of Tibet; Bālī, or Bhōtiā of Baltistan; Ladākhī, or Bhōtiā of Ladakh; Shar pā, or Bhōtiā of East Nepal; Dēnjong-kē, or Bhōtiā of Sikkim; the Bhōtiā of the Tsang district of Tibet; and Lhō-kē, or Bhōtiā of Bhōtan, are those dialects (amongst many others) with which the Census of India is more immediately concerned. Tibetan is found in the State of Sikkim and in the neighbouring Himalaya as a language of immigrants. It is also spoken in Almora and Garhwal (the Himalayan districts of the

United Provinces), and in the State bearing the latter name. In these last localities it is reported under various titles, such as Rankas, Huniyā, Jad, or even Jangali. In other cases the names are simply indicative of the locality where the speakers were found, such as Byāngsi, spoken in Patti Byāngs of Almora. Immediately to the north of the State of Garhwal lie Kanāwar and Spiti. The former has a language of its own, Kanāwari, which will shortly be referred to, but it also includes some fifteen hundred speakers of a tongue called Budkat, Nyamkat, or Sangyās, which is said to be a form of Tibetan.

So also are the dialects of Spiti or Piti and that of the neighbouring Lahaul. These names exhaust the forms which, so far as our information goes at present, the Bhōtiā of Tibet takes in British territory. Ladākhi is well known, thanks to the labours of the Moravian Missionaries at Leh and other scholars. We have a grammar by the Rev. A. H. Francke, and a dictionary by Captain Ramsay, besides numerous detached papers in the journals of various learned societies and in the *Indian Antiquary*. It differs from the standard dialect principally in its want of the tones which are a characteristic of Eastern Tibetan, and in a more archaic pronunciation. Champā, spoken by a nomad tribe of Ladakh, may be provisionally classed as a sub-dialect of Ladākhi. Of Balti we have only some short vocabularies, which are sufficient to show that the archaic character of the pronunciation is retained here still more than in Ladakh. The word *shar* means "east," and Sharpā Bhōtiā is that spoken in North-East Nepal. Little is known about it, but, according to Mr. Sandberg, it differs but slightly from Dēnjong-kē. A sub-variety of it is known as Kāgateh Bhōtiā.

Dēnjong-kē, or Sikkim Bhōtiā, is the language of the predominant tribes of that State. These are descendants of Tibetans who began to overrun Sikkim about 350 years ago, and they now form the ruling race. They came from Tsāng in Tibet, and their language has since developed on lines of its own. We have a grammar of it prepared by the Rev. Graham Sandberg. The Tibetans call Sikkim "Dēnjong," and Bhōtan "Lhō." The Bhōtiā of Bhōtan is therefore called Lhō-kē. It is often called Bhōtānī, and it is found not only in the State from which it takes its name, but also in Darjeeling. The little known Toto, heard in the Buxa sub-division of Jalpaiguri, is probably a form of Lhō-kē. Tsānglo Bhōtiā, spoken on the Assam frontier, is said to be another form of the same dialect.

399. Returning to the extreme west, we find Lāhuli spoken in Lahaul and in the adjoining State of Chamba. It has three dialects, *viz.*, Gārī or Banūn, Tinūn, and Patnī or Manchat. To these may be added Kanāshī or Malānī, spoken in an isolated village in Kulu. The other three are all spoken in Lahaul. How far Lāhuli is to be considered as a separate language, and not merely as an additional form of Bhōtiā, I am not at present able to say. As its name implies, Kanāwari is the language of Kanawar in the Bashahr State of the Punjab. It is a language which has many remarkable characteristics that deserve closer study, and so far as the researches of the Linguistic Survey have gone, it seems probable that it will be found to be one of the Kirānti group to be mentioned later. It has two dialects, Minchang or Malhesti, spoken in Lower, and Tibarskad in Upper Kanawar. The former is said to be mixed with the Indo-Aryan Western Pahārī.

400. Kāmī and Bhrāmū are two dialects of Western Nepal, of which a few speakers have turned up in the Census Returns of British India. Except for vocabularies by Hodgson, nothing is known about them. Padhī, Pahrī, or Pahī has its home in the hills of Central Nepal.

Hāyū or Vāyū is spoken by a tribe inhabiting the basin of the Kosi, east of Nepal Proper, and has been fully described by Hodgson. The Kirānti group of languages was also first brought to light by that eminent scholar. Under that name he included no less than sixteen different forms of speech. According to native authorities, the name is at the present day strictly speaking applied to the languages spoken by the Rāis, *i.e.*, by the Jimdārs and Yākhās who inhabit the portion of the present kingdom of Nepal which lies between the Tāmbor River on the east and the Dud Kosi on the west. For census purposes, Jimdār has been treated as a synonym of Khambū, as is the common opinion, but the country of the true Khambūs, the Khambuān, lies to the north-east of the Kirānti tract, on the southern spurs of the Himalayas. Pending the completion of the Linguistic Survey, the only important languages which I have definitely classed as Kirānti are therefore Khambū (including Jimdār) and Yākhā, although, no doubt, others belong to the same group. Among these are probably Limbū, and perhaps, as already stated, Kanāwari. "Gurung and Mangar," says Mr. Gait, "are spoken by the well-known tribes of the same names who form the backbone of our Gurkha regiments. They and the Sunuwārs have their home in the basin of the Gandak, to the north-west of Nepal Proper, but they have spread eastwards and are now to be found

all over Nepal, and even in Darjeeling and Sikkim. The Gurungs, who in Western Nepal are Buddhists, following the Lāmās of Tibet, show more marked affinities to Tibetan in their vocabulary than do most of the other Nepal tribes. They are now abandoning Buddhism for Hinduism, and at the same time are giving up their tribal language in favour of Khas.....The Mangars are much more faithful to their mother tongue.....The Sunuwārs and Thāmīs have also, as a rule, preserved their own language. Thāmī is sometimes supposed to be identical with Sunuwār, but this is a mistake." Newārī was the ancient State language of Nepal before the overthrow of the Newār dynasty in 1769. As Mr. Gait points out, "Newār" and "Nepāl" are only different forms of the same word, and Newārī is not now a tribal language, but is that of a nation, i.e., of the subjects of the old Newār kingdom. It is the vernacular of Central and Eastern Nepal. Hodgson is the only English authority who has given it any study, but it has received considerable attention from scholars in Germany and Russia, who have published a grammar and a dictionary. The Murmīs of Eastern Nepal, Darjeeling, and Sikkim, are also known as Tamāng Bhōtiās, and are said by tradition to have immigrated from Tibet. For this reason their language has often been classed as one of the forms of Bhōtiā, but, according to Mr. Gait, without valid reason. Its vocabulary much more closely resembles Gurung than it does Tibetan. Mānjhi is said to be the name of two fishing tribes of Nepal, of whom nine hundred have been found in Sikkim, Darjeeling, and Jalpaiguri. The Limbū country proper, or Limbūan, is in Nepal, east of the Kirānti tract, and south-east of the Khambū one. In British territory Limbūs are found in the three localities just mentioned. According to Hodgson it is difficult to assign their language to any known origin. They are said to have a written character of their own. Nearly all these languages of Nepal are, so far as British territory is concerned, either found in Darjeeling and its neighbourhood, or are the vernaculars of members of our Gurkha regiments.

401. Leaving the languages whose home is in the present State of Nepal, we come to Lepcha, or, as its speakers call it, Rong. It is the language of the Lepchas of Sikkim and Darjeeling, and has a written character of its own invented by one of the Sikkim kings in the seventeenth century. It has a literature, and portions of the Scriptures have been translated into it. A grammar and dictionary have been published. Lastly, we find Dhīmāl spoken by a few members of the tribe of the same name in the Darjeeling Terai. It has hitherto been wrongly classed as a member of the Bodo Group of the Assam-Burmese sub-family; but there can be no doubt that it should properly be considered as belonging to the same group as the other Nepal Tibeto-Burman languages. We have a full grammar and vocabulary of this language by Hodgson.

* NORTH ASSAM BRANCH.

402 In describing the progress of the migrations of the Tibeto-Burman tribes, I have stated that, after the Tibetan branch had entered Tibet along the course of the Sanpo, some of its members crossed the Himalayas and appeared on the southern slopes of that range. Of these, the most eastern are the inhabitants of Bhutan and Towang. East of them, extending from Towang up to and beyond the extreme eastern corner of Assam, the hills to the north of the Brahmaputra are occupied by four tribes, the correct classification of whose languages is a matter of considerable doubt. These are, in order, going from west to east, the

Aka

Language	Population returning it
Aka	26
Dafā	805
Abor-Miri	40,826
Mishmi	71
TOTAL, North Assam Branch	41,728

Akas, Angkas, or Hrusso; the Dafās; the Abor-Miris; and the Mishmis. The Akas or Angkas, as they are called by their neighbours, or Hrusso, as they call themselves, dwell in the hills north of Darrang, in a corner between Towang and Assam. Very little is known about their language. Robinson gave a short vocabulary in 1841, Hesselmeier a fuller one in 1868, and Mr. J. D. Anderson another in 1896. The first differs altogether from the two latter, and closely agrees with Dafā. The Aka of Hesselmeier and Anderson is a Tibeto-Burman language, but so far as I can make out from the materials available, differs widely

from the speech of any other tribe of the family with which I am acquainted.* Even the numerals and the pronouns have special forms. Some of its words, however, show points of agreement with Daflā. There are very few of the tribe or of the Daflās in British territory proper. East of the Akas lie the Daflās, ^{Daflā} east of them the Miris, and east of them, on both sides of the Dihang River, the Abors. The Miris and the Abors speak the same language, with only dialectic differences, and it is closely connected with Daflā. We know a good deal about Abor-Miri and Daflā. Robinson gave us grammars and vocabularies of both in ^{Abor-Miri} the middle of the last century, and, to omit mention of less important notices, in later times, Mr. Needham has given us a grammar of the former, and Mr. Hamilton one of the latter. I have stated above that Daflā and Aka have some common vocables (they do not appear to be borrowed words), and it has been reported by one observer that Abor shows points of affinity to the nearest of the Mishmi languages.

403. The Mishmis, who inhabit the hills north of Sadiya, are divided into four ^{Mishmi} tribes, speaking three distinct, but probably connected, languages. The most western tribes are the Midu (? Nedu) or Chulikata (hair-cropped) Mishmis, who ^{Chulikata} occupy the valley of the Dihang River with the adjoining hills, and, to their east, the Mithun or Bebejiya (outcast) Mishmis. These speak practically the same language, but about that language we know hardly anything. We have only an imperfect vocabulary collected by Sir George Campbell. Even the indefatigable Robinson failed to get specimens of it. All that he can say is "they speak a language peculiar to themselves, yet bearing some affinity to that spoken by their neighbours the Abors and Miris." East of the Bebejiyas lie the Taying or Digāru Mishmis, beyond the Digāru River. The Miju Mishmis are still ^{Digāru} further east, towards the Lama Valley of Dzayul, a sub-prefecture of Lhasa. ^{Miju} Robinson has given us grammars and vocabularies of both these, and Mr. Needham has also written a Digāru vocabulary. The two languages are very different.

So far as the means at our disposal permit us to draw conclusions, it seems most probable that these four tribes belong neither to the Tibeto-Himalayan nor to the Assam-Burmese branch of the Tibeto-Burman languages. They seem to be the descendants of clans which, when the parting of the ways between the two branches took place, accompanied neither, but made their own way at different periods into the hills overlooking the Assam Valley from the north.

ASSAM-BURMESE BRANCH.

404. The probable race history of the tribes which speak the forms of speech

Group	Population returning it
Bodo	596,411
Nāgā	247,789
Kachin	125,775
Kuki-Chin	624,149
Burma	7,498,794
TOTAL, Assam-Bur- mese Branch	9,092,902

belonging to the Assam-Burmese branch of the Tibeto-Burman languages has been glanced at in the preceding pages, and more details will be given later on. This branch is further divided into the following groups:—the Bodo, the Nāgā, the Kachin, the Kuki-Chin, and the Burma. Of these, the Bodo and Nāgā groups are most nearly connected with the Tibeto-Himalayan languages, while the Kuki-Chin and Burma groups form a sub-group having somewhat independent characteristics. Between these two sub-groups, but most closely

connected with the former, lies the Kachin group.

405. The group of tribes known as Bodo forms the most numerous and important ^{Lolo Group}

Language.	Population returning it
Bodo	289,458
Talang	16,412
Dima-sa	19,840
Chantia	2,864
Garo	185,940
Khasi	20,248
Tippera	111,974
Mura	78
TOTAL, Bodo group	596,411

section of the non-Aryan tribes of the Province of Assam. Linguistic evidence shows that at one time they extended over the whole of the present province west of Manipur and the Naga Hills, excepting only the Khasi and Jaintia Hills, which are inhabited by people speaking another language akin to the Mōn-Khmēr dialects of Indo-China. To the north of the Khasi Hills they occupied the whole, or nearly the whole of the Brahmaputra Valley. To the west they made the Garo Hills their own. To the south they extended over the plains of Cachar and, further, over the present state of Hill Tippera.

On the east their sphere of influence was bounded by Manipur and the wild tribes of the Naga Hills. Between the latter and the Khasi Hills an important tribe of them were settled in the hills of North Cachar. One branch of the family, popularly known as the Kōch, extended their power to far wider limits, and overran the whole of Northern Bengal, at least as far west as Purnea.

During the course of centuries the members of the Bodo family have suffered much from external pressure. From the east came the Āhoms, who occupied the Brahmaputra Valley, and ruled it for centuries till we annexed it, so that, in that neighbourhood, we only know of powerful Kōch kingdoms in Western Assam and in Cooch, or Kōch, Bihar. To the east the Bodo tribes sank into insignificance, and their members can now only be identified in communities of a few hundred souls each, except where the mountainous nature of their homes has enabled them to maintain their independence.

The Bodo country was also invaded from the south, and this within the last two centuries. Pressed forward by their co-tribesmen beyond them, Kuki hordes left the Lushai and Chin Hills and migrated north, settling in Manipur, the Cachar Plains, and more especially in the hill country of North Cachar, where the population is now a mixed one, partly Bodo and partly Kuki.

But the most important invasion was that of Aryan culture from the west. With its language it has occupied the plains of Dacca, Sylhet, and Cachar, so that the Bodos of the Garo Hills are now separated from their kinsmen of Hill Tippera by a wide tract filled with a population speaking an Aryan language. So, too, with the valley of the Brahmaputra. It is almost completely Aryanised, and the old Bodo languages are gradually dying out. The ancient kingdom of Cooch Bihar claims Bengali as its language, the old forms of speech surviving in only a few isolated tracts. In Kamrup and Goalpara, the former head-quarters of the kingdom of Kāmarūpa, the speakers of the Aryan Assamese and Bengali are counted by hundreds, while those of Bodo are counted by tens. The very name Kōch has lost its original meaning, and has now come to signify a Bodo who has become so far Hinduised that he has abandoned his proper tongue and is particular as to what he eats. Nay, many of those Bodos who still adhere to their old form of speech are trilingual. Numbers of them can speak Assamese, and in addition to this they commonly employ, not only their own pure racy agglutinative tongue,* but a curious compound mongrel made up of a Bodo vocabulary expressed in the altogether alien idiom of Assamese.

Koch
Language

406. I have said above that the word "Koch" has lost its original meaning, and now signifies a Hinduised Bodo. There is, however, in the Madhupur Jungle on the borders of Dacca and Mymensingh, in the Garo Hills, and the neighbouring districts of the Assam Valley, a body of people, known as Pami, *i.e.*, little, Kōch, which still speaks a language of the Bodo group. It is

Speakers of 'Koch'		
District	Population returning it	
Dacca	10,181	
Mymensingh	2,480	
Garo Hills	3,423	
Elsewhere	320	
TOTAL, 'Kōch'	16,864	

doubtful, however, if they are Kōches at all. According to some authorities they are Gārōs who have never got beyond an imperfect stage of conversion to Hinduism, involving merely the abstinence from beef. It has been conjectured that they assumed this name of "little" or "inferior" Kōches by way of propitiating the thoroughly Hinduised Kōch power which was predominant on their borders. If the specimens of their language* which I have seen are correct, it is a mongrel Gārō largely mixed with Assamese, and is the only form

of speech known by the name of Kōch at the present day.*

Kachari

407. The true Kōches are, at any rate, now represented by the Kacharis, who inhabit Nowgong, Kamrup, Goalpara, Cooch Bihar, and the neighbouring country. Towards the east of this tract they call themselves Bārā, usually mispronounced "Bodo," and have given their name to the whole group of languages, of which their tongue is a member. Towards the west they are called Meches, but everywhere the speech is the same, with few local peculiarities. Their language is a fairly rich one, and is remarkable for the great ease with which roots can be compounded together, so as to express the most complex idea in a single "portmanteau" word. For instance, the sentence "go, and take, and

* See, however, the remarks on page 335 of Mr. Gait's Bengal report.

see, and observe carefully" is indicated by a single word in Kachāri. Of all the languages of the group it is the most phonetically developed, and here and there shows isolated signs of the commencement of that true inflection which is strange to most agglutinative languages. Another interesting fact is that in it we see going on before our eyes that process of phonetic attrition which, in all the languages of the family, has turned dissyllables into monosyllables, and has created that characteristic isolated appearance of all the Indo-Chinese tongues.

To take an example the word *sā* means person, and the word *fi* is a causal prefix. Hence the compound *fi-sā* means "a made person," i.e., "a child," for the Tibeto-Burman mind cannot grasp the abstract idea which we connote by the word "child," and can only think of a child in reference to its father, the person who made it. But here accent comes in. It is put on the second word of the compound, so that the *i* of *fi* is hardly audible, and we get *f-sā*. This accounts for the origin of the word for "child" in cognate languages. It is always a monosyllable, *fsā*, *bsā*, or something of that sort. We should never have known the real meaning of this monosyllable had we not Kachāri for our guide. Nay, Kachāri itself makes secondary monosyllables in this way. For instance, *rān* means "to be dry" but *frān*, which we now know to be contracted from *fi-rān*, means "to make dry."

408. Closely connected with Kachāri is the Lālūng spoken in South-West Nowgong and the neighbourhood. It forms a link between it and Dimā-sā. This last is the Bodo language spoken in the hill country of North Cachar. The name of the locality where it is spoken has led to its being called "Hills Kachāri," which has the disadvantage of inducing the belief that it and the "Plains Kachari" of Kamrup, are different dialects of the same language.* Really these two are not so closely connected as French and Spanish. They both belong to the same linguistic group, and both, no doubt, have a common ancestor, but, at the present day, they are quite distinct forms of speech, and it is

Dialect.	Population returning it.	
Standard Dimā-sā	19,776	
Hōjai	164	
TOTAL, DIMĀ-SĀ	19,940	

best to call Hills Kachāri by the title which its speakers give to themselves, Dimā-sā. It has a dialect of its own spoken in South Nowgong called Hōjai. Going still further up the Assam Valley, we find the most eastern of the Bodo languages, the Chutiā, which is fast dying out. It is spoken only by a few Deoris, who form the priestly caste of the Chutiā tribe. They have preserved, in the midst of a number of alien races, the language, religion, and customs which they brought about a hundred years ago from the country east of Sadiya, and which, we may presume, have descended to them with comparatively little change from a period anterior to the Ahom invasion of Assam. Their present seats are on the Majuli Island in Sibsagar, and on the Dikrang River in North Lakhimpur. Of the languages of the Bodo group, it appears to have preserved the oldest characteristics, and to most nearly approach the original form of speech from which they are all derived. It and Kachāri represent the two extremes, the least developed and the most developed of the group. Like the latter, it exhibits the remarkable facility for forming compound verbs to which attention has already been drawn. This is probably a characteristic of all the dialects of the Bodo group, but these two are the only ones which have been studied in a thorough manner.

409. Returning to Western Assam, we have next to consider Gārō, or as its speakers call it, Māndē Kusik, the language of men. Its proper home is the Garo Hills, but its speakers have overflowed into the plains at their feet, and have even crossed the Brahmaputra into Cooch Bihar and Jalpaiguri. Garo, in its standard dialect, the Achik, has received some literary cultivation at the hands of the local missionaries, and, besides possessing a version of the Bible, has a printed dictionary, school books, religious works, and a monthly magazine which is now in the twenty-second year of its existence. It has a number of

* The Dimā-sā of North Cachar and the Bodo of Kamrup formed one nationality till about 1510 A.D. when the Ahoms conquered the former, who at the time occupied the Dihansiri Valley as far as the Brahmaputra, with Dimāpur for their capital. They then retreated to the North Cachar Hills. The differentiation between Dimā-sā and Standard Bodo has therefore probably taken place since that date. Up to that time there had been free communication between the two branches.

dialects which bear a strong resemblance to each other, though to a foreigner learning to converse with the natives the differences are striking enough. That known as Ātong or Kuchu presents the greatest variations. Gārōs from other parts of the Garo Hills can make themselves fairly well understood wherever they go except in the Ātong country. It is spoken in the lower Sômeswari Valley which lies south-east of the Garo Hills, and in the north-east of the district of Mymensingh. It appears to approach most nearly the original language from which the various dialects are derived, for we meet typical Ātong peculiarities in the most widely separated places where Gārō, in a more or less corrupt form, is spoken. A language closely connected with Gārō is Rābhā, which has most speakers in the district of Goalpara. It is dying out. Rābhā appears to be a Hindū name for the tribe, and many men so called are pure Kachāris. At one time they formed the fighting clan of the Bodo family, and members of it joined the three Assam regiments before they took to recruiting Gurkhas."

Kābhā

Tipurā

410. The remaining important language of the Bodo group is Tipurā. Its home is the State of Hill Tippera and the adjoining portion of the Chittagong Hill Tracts, but speakers of it are also found in Dacca, Sylhet, and Cachar. The Chittagong Hill Tracts people call it Mrung. It shows points of connection with both Dimā-sā and Gārō, and generally has all the characteristics of the group in which it is included. An interesting point is that its word for "man" is *bārāk*, which is almost identical with the name Bārā by which the Kachāris of Kamrup and the neighbourhood call themselves.

Morān

411. To complete the survey of this group, we may mention Morān, a language which is practically extinct. The Morāns were the first tribe conquered by the Āhoms when they entered Assam from over the Patkoi. They were employed by their vanquishers as carriers of firewood, and are still found in Sibsagar and Lakhimpur. Their language belonged to the Bodo group, but they have nearly all abandoned it in favour of Assamese.

Naga Group.

412. While the number of speakers of languages belonging to the Nāgā group is less than half that of those whose mother speech is Bodo, the number of Nāgā languages is more than four times as many. The extraordinary diversities of speech, differences of language, not merely of dialect, which characterise the hill country between the Patkoi range on the east, the Jaintia Hills on the west, the Brahmaputra Valley on the north, and Manipur on the south, render it one of the most interesting fields for investigation by the philologist. The Assam Valley proper is bounded on the south by ranges of hills separating it from Sylhet and Cachar. At its western end these are comparatively low, and under the name of the Garo Hills are in-

Orography

Sub group	Population
Nāgā-Bodo . . .	90,228
Western . . .	40,858
Central . . .	45,158
Eastern . . .	1,895
Unclassed . . .	69,641
Total, Nāgā group .	247,780

habited by a people speaking a language belonging to the Bodo group. As we go east they become the Khasi and Jaintia Hills, with summits rising more than six thousand feet above the level of the sea. Then we have a drop into the valleys of the Kapili and Dhansiri, a country of low hills forming the sub-division of North Cachar. Further east, the general level of the tract rapidly rises up to Patkoi, including the south of the Nowgong, Sibsagar, and Lakhimpur districts, the whole of the Naga Hills and the north of Manipur. Here we have a confused mass of mountains some of them rising to nine or ten thousand feet, which, as we go eastwards, become ranges running north and south, connected with the Himalaya through the Patkoi and the hills beyond, and extending southwards, through Manipur and the Lushai Hills, until they terminate in the sea at Cape Negrais. It is in this country, between North Cachar and the Patkoi, that the Nāgā languages are mainly spoken. The inhospitable nature of the land and the ferocity of the inhabitants have combined to foster this diversity of speech. Where communication is so difficult intercourse with neighbouring tribes is rare, and, in former times, when heads were collected as eagerly as philatelists collect stamps and no girl would marry a young fellow who could not display an adequate store of specimens, if intercourse did take place, the conversation was sure to be more or less one-sided. Under such circumstances, monosyllabic languages, such as the Nāgā ones, with no literature, with a floating pronunciation, and with a number of loosely used prefixes and suffixes to supply the ordinary needs of grammar, are bound to change very rapidly, and

quite independently of each other. Cases are on record in which members of a tribe who have emigrated but a comparatively short distance have developed a language unintelligible to the inhabitants of the parent village in a couple of generations.

413. Between the Bodo and the Nāgā languages, there is an intermediate group belonging in the main to the latter, but possessing distinct points of contact with the former. Of these the principal speech is Mikir, the head-quarters of which are now in the hills that bear the same name in the Nowgong district of Assam, and which is also spoken in slightly varying dialectic forms in South Kamrup, the Khasi and Jaintia Hills, North Cachar, and the Naga Hills. Small colonies of the tribe are also found elsewhere, and it cannot be doubted that in former times the Mikirs occupied a comparatively large tract of country in the lower

Language.	Population returning it
Mikir . . .	88,620
Empō . . .	8,604
Kabui . . .	4
Khoirāo . . .	
TOTAL, Nāgā-Bodo	90,228

hills and adjoining lowlands of the central portion of the range stretching from the Garo Hills to the Patkoi. Their language has received some attention from the missionaries who are settled among them. We have a vocabulary and some short pamphlets written in it, and a grammatical sketch has lately been prepared by Sir Charles Lyall. Empō or Kachchā Nāgā is spoken in North Cachar and the western Naga Hills. It is another of these intermediate languages, and shows points of connection not only with Bodo, but also with Kuki forms of speech. It is, however, in the main Nāgā. Kabui or Kapwī and Khoirāo belong to North Manipur. They were not separately enumerated at the census, and are contained in the large figure shown above as "unclassified." They are both related to Empō. Kabui is also found in the hills of East Cachar. We have vocabularies of it and Empō, and a grammar of the latter by Mr. Soppitt, but till the inquiries of the Linguistic Survey were started, nothing was known about Khoirāo. The Survey will supply grammars of all these intermediate speeches. In it they are classed as together forming the Nāgā-Bodo Sub-group of the Nāgā languages.

414. Turning to the Nāgā languages proper, we find them falling naturally into three sub-groups, a western, a central, and an eastern. Of the western languages the most important is Angāmi, with its two dialects, Tengimā and Chakromā, and numerous sub-dialects, of which the principal are Dzunā, Kohenā, and Nāli. A good deal is known about Tengimā. Commencing in the year 1850, Hodgson, Brown, Stewart, and Butler have all given us vocabularies, and the descriptions of the tribe by the last two are classics. We have a grammar written by Mr. McCabe in the year 1887, and finally the accounts of the language and of the habits and customs of the tribe supplied by Mr. A. W. Davis, for the Assam Census Report of 1891, are too well known to students of these subjects to require more than a reference. To the east of the Angāmis are the Kezhāmās, to whose north again lie the barbarous and savage Semās. North of the Angāmis and west of the Semās are the Rengmās. Until the commencement of the Linguistic Survey nothing whatever was known about the Kezhāmā language, and we had only short and incomplete lists of a few words each in Semā and Rengmā. Grammars and vocabularies of all will now shortly become available. It may be added that some thirty years ago, a number of Rengmās were driven out of their proper home by the constant attacks of neighbouring tribes, and settled on a range of hills lying between the Mikir Hills in the Nowgong district and the forests of the Dhansiri. This portion of the tribe has lost most of its savage customs, and has to some extent taken to the habits of the people of the plains, while the others retain their primitive simplicity. All these languages belong to the Western Nāgā sub-group. The most characteristic feature which distinguishes them from the members of the Central sub-group is, that the negative particle follows the word which it negatives, whereas in the Central sub-group it precedes it.

Language	Population returning it
Angāmi . . .	27,865
Kezhāmā . . .	1,546
Rengmā . . .	5,617
Semā . . .	5,880
TOTAL, Western Nāgā Sub-group	40,888

Western Nāgā Sub-group.
Angāmi.

Kezhāmā,
Semā, and
Rengmā

Central Nāgā
Sub group.

415. The principal members of the Central sub-group of the Nāgā languages are Āo and Lhōtā. Assiringiā, Tengsā, Thukumi, and Yachumi are minor ones. We have excellent grammars and vocabularies of both Āo and Lhōtā prepared by local missionaries. The former is well known and has often been written about, but the literature concerning it is not always easy to find, as it has been described under at least nine different names. It has two well marked dialects, Chungli and Mongsen, and is spoken in the north-east of the Naga Hills district. Lhōtā is spoken south of Āo about the centre of the same district, where it abuts on Sibsagar. Its speakers are usually called Lhōtā or Tsōntsū, but they call themselves Kyōñ, while they are known to the Assamese by the name of Miklai. It has no marked dialectic variations. Assiringiā is spoken in an isolated village in the Āo country, and Tengsā, Thukumi, and Yachumi by tribes outside the settled British territory beyond the Dikhu. Very little is known about them, but short vocabularies enable us to class them as connected with Āo and Lhōtā.

Language	Population returning it
Āo	
Āo	28,135
Lhōtā	16,962
Assiringiā	
Tengsā	
Thukumi	20
Yachumi	35
Lhōtā.	
TOTAL, Central Nāgā Sub-group	45,158

Dialect.	Population returning it
Assiringiā.	
Tengsā,	
Thukumi and	
Yachumi	
Chungli	17,823
Mongsen	10,512
TOTAL, Āo..	28,135

Eastern
Nāgā Sub-
group.

416. In the Eastern Nāgā sub-group are included the languages of all the tribes found in the tract lying east of the Āo country, extending to the Kachin country on the east and bounded on the south by the Patkoi range. Within these limits there are many different tribes, some of them consisting of only a few villages, and all, or nearly all, speaking languages unintelligible the one to the other. Within twenty miles of country five or six dialects are often to be found. The information which we possess regarding the languages spoken in this area is very scanty, but, so far as our knowledge extends at present, a considerable affinity appears to exist amongst them. There is also a great resemblance in the manners and customs of the Nāgās of this tract; they nearly all expose their dead upon bamboo platforms, leaving the body to rot there, the skull being preserved in the bone-house, which is to be found in nearly every village. In several of the tribes the women are perfectly naked, in others the men.

Language	Population returning it.
Tableng	198
Tamlu	1,545
Mojung	152
Banpuā	..
Mutomiā	..
Mohohguā	..
Namsangiā	..
Mōshāng	..
Shānggō	..
* TOTAL, Eastern Nāgā group	1,895

Characteris-
tics of the
Eastern Nāgā
languages.

417. The most important general point about these Eastern Nāgā forms of speech is, that they form a group of transition languages bridging over the gulf between the other Nāgā tongues and Kachin or Singphō, the great language which lies to their east and south. Another peculiarity which deserves notice is, that at least four languages of the sub-group, Tableng, Tamlu, Mojung, and Namsangiā, appear to have an organic conjugation of the verb. Each tense seems to change according to the person of the subject, a state of affairs quite foreign to the other Nāgā languages and to Singphō, and almost foreign to the Bodo group. The Namsangiā verb (while not changing for number) has its three persons for each tense, just like Assamese or Bengali.

Tableng and
Tamlu.

418. Taking these Eastern Nāgā languages from west to east, the first we meet are Tableng and Tamlu. A rough estimate shows that these are spoken each by about 2,500 persons, naked savages who reside (sometimes both in the same village) in the hills on both sides of the Dikhu River, before it enters the valley of the Brahmaputra. Like so many of these Tibeto-Burman tribes they call themselves simply by their word for "man,"—*Kātā*. Tableng and Tamlu are the names given to them by the English after the villages in which they live. They call their own languages Angwangku and Chingmegnu respectively. Politically, their habitat is in the extreme north-east of the Naga Hills district. Beyond the Dikhu River, outside settled British territory, we find a language

called by the Aös Mojung, and by its speakers, who are estimated to be about 6,500 in number, Chäng. The Aös call all trans-Dikhu Nāgās "Miri," and hence the Mojungs are often alluded to by that name, which should be avoided, as leading to confusion with the altogether different Miris of the upper waters of the Subansiri. Nearly connected with Mojung is the Banparā, with one dialect called Mutoniā, which is spoken by the tribes in western and central Sibsagar to the east of the Tableng. We have only a few lists of words of this language and its dialect. At the eastern extremity of the same district lie the Mōhongiās, also called Borduariās and Pāniduariās. Brown, writing in the year 1851, says that their language is the same as Namsangiā, but this is not borne out by the only specimen of their language in existence—the first 10 numerals published by Peal in 1872. Crossing the Sibsagar frontier, we find the Nāgās of Lakhimpur, usually known by the name of Namsangiās, but also called Jaipurīā Nāgās after the name of the village through which they mostly descend to the plains. We know more about their language than we do about any others of the eastern sub-group, for Robinson published a grammar and vocabulary of it in the year 1849. Owen, Hodgson, Brown, Peal, Sir George Campbell, and Butler have also given us more or less extended lists of words. Since then nothing has been done regarding them. Indeed at the present day local Europeans seem to know much less about the languages of the Nāgā tribes of Sibsagar and Lakhimpur than did their predecessors of a generation ago. Even the Linguistic Survey has failed to obtain any additional information concerning them. The list of eastern Nāgā languages is completed by a reference to Mōshāng and Shānggē, the languages of two tribes in the wild country south of the Patkoi. Mr. Needham has given us short vocabularies of them, and that is all that we know on the subject. Further to the east and south we have the great Kachin country, the main language of which is Kachin or Singphō. It forms a link between the Nāgā and Tibetan languages on the one side and Burmese on the other, and also leads, through the Meithei of Manipur, from Nāgā and Tibetan into the Kuki-Chiu group.

419. There is, however, another chain of connection between Nāgā and Kuki, the Nāgā-Kuki sub-group of languages, which exactly corresponds to the Nāgā-Bodo sub-group, leading from Nāgā into Bodo. South of the Angāmi country lie the hills of North Manipur, and here, mixed with the Kuki languages proper which are spoken in that State, we find several distinctly Nāgā ones. The first is Sopvomā, used by the Nāgās of the country round Māo on the Manipur Naga Hills frontier, about 20 miles south of Kohima. It is the language of this sub-group which most nearly approaches the true western Nāgā speech, its closest relation being Kezhāmā. South of the Māos lie the Marāms, inhabiting one large village. The two tribes claim to have a common origin, but are perpetually at feud with each other. Both Brown and McCulloch have given us vocabularies of their language, which are sufficient to show that it is different from, but akin to, Sopvomā. In connection with Marām, we may mention Miyāngkhāng, classed by Damant with it and Sopvomā. Nothing more is known about it. Here, also, we may insert Kwoireng or Liyāng, of which we have vocabularies by Brown and McCulloch. The tribe which speaks it inhabits the country north of Manipur lying between the Kachchā and the Kabui Nāgās, as far as the Angāmis, from whom they have suffered much. They are a considerable body of people, possessed of much energy, which develops itself in trade with the Angāmis and our frontier districts. Their language appears to be an intermediate one between the Nāgā-Bodo and Nāgā-Kuki sub-groups. The forms taken by its pronouns agree best with the latter, and so it is mentioned here, though the geographical position of its speakers would incline one to put it with the former set of languages. The large and important tribe of the Luhūpās or Luppās, occupies the north-east of Manipur. They are distinguished from other tribes by (amongst other customs) the *luhūp* or curious helmet of cane which they wear when going into battle. The number of languages spoken by them is said to be very great, almost every village in the interior having its

Language.	Population returning it.
Sopvomā	Not separately enumerated. Contained in the heading "Unclassed Nāgā languages."
Marām	
Miyāngkhāng	
Kwoireng	
Luhūpā	
Maring	

the Nāgā-Kuki sub-group of languages, which exactly corresponds to the Nāgā-Bodo sub-group, leading from Nāgā into Bodo. South of the Angāmi country lie the hills of North Manipur, and here, mixed with the Kuki languages proper which are spoken in that State, we find several distinctly Nāgā ones. The first is Sopvomā, used by the Nāgās of the country round Māo on the Manipur Naga Hills frontier, about 20 miles south of Kohima. It is the language of this sub-group which most nearly approaches the true western Nāgā speech, its closest relation being Kezhāmā. South of the Māos lie the Marāms, inhabiting one large village. The two tribes claim to have a common origin, but are perpetually at feud with each other. Both Brown and McCulloch have given us vocabularies of their language, which are sufficient to show that it is different from, but akin to, Sopvomā. In connection with Marām, we may mention Miyāngkhāng, classed by Damant with it and Sopvomā. Nothing more is known about it. Here, also, we may insert Kwoireng or Liyāng, of which we have vocabularies by Brown and McCulloch. The tribe which speaks it inhabits the country north of Manipur lying between the Kachchā and the Kabui Nāgās, as far as the Angāmis, from whom they have suffered much. They are a considerable body of people, possessed of much energy, which develops itself in trade with the Angāmis and our frontier districts. Their language appears to be an intermediate one between the Nāgā-Bodo and Nāgā-Kuki sub-groups. The forms taken by its pronouns agree best with the latter, and so it is mentioned here, though the geographical position of its speakers would incline one to put it with the former set of languages. The large and important tribe of the Luhūpās or Luppās, occupies the north-east of Manipur. They are distinguished from other tribes by (amongst other customs) the *luhūp* or curious helmet of cane which they wear when going into battle. The number of languages spoken by them is said to be very great, almost every village in the interior having its

Banparā and
Mutoniā

Mōhongiā
Namsangiā

Mōshāng and
Shānggē.

Nāgā-Kuki
Sub-group.

Sopvomā

Marām

Miyāng-
khāng.
Kwoireng

Luhūpā
languages.

Tangkhal,
Phadāng, and
Khangoi.

Maring

Kuki-Chin
Group

separate dialect. We may select three as typical—Tangkhal, Phadāng, and Khangoi. Brown has given* three short vocabularies of Tangkhal, and the Linguistic Survey has succeeded in obtaining sufficient specimens to compile a short grammar and vocabulary. The head-quarters of the tribe are at Ukul, about 40 miles to the north-east of Manipur town, and the same distance to the south-east of the Māo tract. McCulloch has given us vocabularies of Phadāng and Khangoi. The former closely agrees with Tangkhal, while Khangoi has much more of a Kuki complexion. The latter leads us to Maring, spoken by a Nāgā tribe inhabiting a few small villages in the Hirok range of hills which separates Manipur from Upper Burma. There is also a small colony of them in the Manipur Valley about 25 miles south of the capital of the State. It has two dialects, *viz.*, Khoibu and Maring, which are closely related to each other. It is the one of the Nāgā-Kuki languages which most nearly approaches the Kuki-Chin group. The pronoun of the first person is the same as in Kuki. Both Brown and McCulloch have given us Maring vocabularies, and the Linguistic Survey has succeeded in collecting sufficient materials to compile a short grammar of the language.

420. The territory inhabited by the Kuki-Chin tribes extends from the Naga Hills, Cachar, and East Sylhet on the north, down to the Sandoway district of Burma in the south; from the Myittha River in the east, nearly to the Bay of Bengal in the west. It is almost entirely filled up by hills and mountain

Sub groups	Population returning it
Meithei .	272,997
Old Kuki .	8,844
Northern Chin	3,470
Central Chin	76,031
Southern Chin	27,162
Unspecified	235,645
TOTAL, Kuki-Chin group	624,149

ridges, separated by deep valleys. We find the tribes also in the Valley of Manipur and in small settlements in the Cachar plains and Sylhet. Both the names "Kuki" and "Chin" have been given to them by their neighbours. "Kuki" is an Assamese or Bengali term applied generally to all the hill tribes of this race in their vicinity, while Chin or Khyeng is a Burmese word used to denote those living in the country between Burma and Assam. Neither of these terms is employed by the tribes themselves. The denomination "Kuki-Chin" for this group of people and for the group of languages which they speak is therefore a purely conventional one, there being no indigenous general name for all of them as a whole. The tribal languages fall into two main sub-groups, which we may conveniently call the "Meithei" and the "Chin." We have already seen how it is probable that this stock migrated from the north or north-east into the Manipur Valley and there settled, while another branch of the same stock proceeded further south and filled the Lushai and Chin Hills. Assuming that this represents the true facts of the national movement, Meithei represents the language of the original settlers in Manipur, and Chin that of the southern migration. In these southern seats the language rapidly developed, partly by its own natural growth and partly owing to contact with the Burmese. The

Meithei.

Language	Population returning it
Meithei .	272,997

development of Meithei, the language of the Manipuris, has, on the other hand, been slow and independent. The Manipuris are mentioned in the Shān chronicles so early as A.D. 777, and probably owing to the fact that it has in later times developed into a literary language, their form of speech gives the impression of possessing a peculiarly archaic character. Although they have become thoroughly Hinduised, they have not adopted any Aryan tongue; Meithei is the official language of the State, which all other tribes have to use in dealing with their rulers. Our information regarding it is not very satisfactory. We do not know if there are any dialects, and even the literary language has not been fully dealt with. It is not improbable that further inquiries will show that the apparent gulf between Meithei and the other Kuki-Chin languages is filled up by intermediate forms of speech; and this much seems certain, that it has preserved many traces of a more ancient stage of phonetic development, and hence sometimes agrees more closely with Burmese, and even with Tibetan, than with the Kuki-Chin languages proper. On the other hand, in certain respects it shows points of common origin with the Nāgā languages, and especially with Kachin, being a

connecting link between them and the southern, more developed, forms of speech.

421. The Chin sub-group contains over thirty distinct languages, which may again be sub-divided into Northern Chin, Central Chin, Old Kuki, and Southern Chin. Owing to the tendency to employ the generic term "Kuki" or "Chin" to denote a specific language, the census figures for these languages are worth very little. No less than 235,000 people have been returned as speaking unspecified Kuki-Chin languages, while the total number of persons shown as speaking definite languages is only about half that number. The Old Kuki languages are most nearly connected with the Central Chin ones, but, for historical reasons, it will be most convenient to consider them first. They are thirteen in number, and are spoken by several tribes now living in Manipur, Cachar (especially the northern sub-division), Sylhet, and Hill Tippera, who migrated to their present settlements early in the nineteenth century from their original homes in and about Lushai Land. Only one tribe, the Mhār, remained in its original seat, and their language is at the present day much mixed with Lushēi. This migration was indirectly due to the pressure exercised by the Lushais. These pressed the Thādos from the south, who in their turn pressed the Old Kukis northwards into their present homes. The Thādos now occupied the old home of the Old Kukis, but the irresistible progress of the Lushais northwards still continued, and the Thādos followed those whom they had dispossessed into almost the same localities; and, as their arrival was later, they and their fellows became popularly known as New Kukis, the earlier immigrants being known as Old Kukis. "Old Kuki" connotes a distinct group of cognate tribes and languages, and the name may be preserved as a convenient designation, but "New Kuki" connotes only one tribe, the Thādos, out of five closely connected ones, the rest of whom still live in the Lushai and Chin Hills. It is, therefore, best to abandon the term "New Kuki," and to call the whole group of five by the name of "Northern Chins." The Lushais now occupy the old seat of the Old Kukis, and of, subsequently, the Thādos. After dispossessing the latter, they still attempted their progress north, and it was this which first brought them into hostile contact with the British power.

We have thus seen that there was a reflex wave of migration of the Chin tribes, so that we find Manipur inhabited, not only by speakers of the early Meithei, but also by numbers of tribes whose native languages, once the same as an old form of that speech, have developed independently, and, owing to the want of a literature, much faster in a country far to the south. It is much as if we were to find a colony of Roumanians settled in central Italy.

422. The principal Old Kuki languages are Rāngkhōl and the closely-connected Bētē, spoken in Hill Tippera and North Cachar, Hallām, spoken in Sylhet and Hill Tippera, and Langrong, also spoken in the latter State. We have a grammar of Rāngkhōl by Mr. Soppitt, but, till the Linguistic Survey, very little has been known about the others. No less than eight languages are spoken by small Old Kuki colonies in the State of Manipur. These are Aimol, Anāl, Andrō, Chiru, Hiroi-Lamgāng, Kolrēn, Kōm, and Pūrūm. Mhār is still spoken in Lushai Land, the tribe having accepted the Lushai domination; and finally, far to the south, on the banks of the Koladyne, we find Chaw spoken by the descendants of some Old Kuki slaves who were offered to a local pagoda by a pious queen of Arakan some three centuries ago. Separate figures for only a few of the speakers of these Old Kuki languages are available

Language.	Population returning it.
Rāngkhōl . . .	4,766
Hallām . . .	3,693
Andrō . . .	1
Mhār . . .	169
Chaw . . .	215

These are Aimol, Manipur languages
Anāl, Andrō, Chiru, Hiroi-Lamgāng, Kolrēn, Kōm, and Pūrūm. Mhār is still spoken in Lushai Land, the tribe having accepted the Lushai domination; and finally, far to the south, on the banks of the Koladyne, we find Chaw spoken by the descendants of some Old Kuki slaves who were offered to a local pagoda by a pious queen of Arakan some three centuries ago. Separate figures for only a few of the speakers of these Old Kuki languages are available

The rest fall under the head of "Kuki-Chin unspecified."

423. The Northern Chin group of languages includes Thādo, Sairāng, Sōktē, Siyin, Rāltē, and Paitē. The Thādos, who include the Jangshēns, and who are sometimes, as explained above, called New Kukis, formerly lived in the Lushai and Chin Hills, where they had established themselves after having expelled the Old Kuki Rāngkhōl and Bētē tribes. They were themselves gradually ousted by the Lushais from the former tract, and settled down in Cachar, and the Naga

Language	Population returning it
Thādo	3,399
Sai	71

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Hills some time between the years 1840 and 1850. About the same time the Thādos of the Chin Hills were conquered by the Sōktēs and were driven north into the southern hills of Manipur, where they are now found and are locally known as Khongzāis. There are at present only six Thādo villages left in the Chin Hills. The 71 Sairāngs are also found in the Naga Hills, but no doubt a number of them also exist in Cachar, who have escaped separate enumeration. The Sōktē tribe, which includes the Sōktēs proper and the Kamhows (or, as the Burmese call them, Kanhows) occupy the northernmost part of the Chin Hills, and the Siyins, the hills immediately to their east, round Fort White. The Rāltēs are principally found in the western parts of the Lushai Hills, but in modern times bodies of them have settled in Cachar, both in the plains and in the hills. The Paitēs are scattered all over the Lushai Hills, a few being found in almost every village. They have accepted the Dulien domination, but have retained their own language, which, however, like Rāltē, is much mixed with Lushēi. As in the case of Old Kuki, most of the speakers of the languages of this sub-group, must be sought for under the general head of "Kuki-Chin, unspecified."

Central
Chin —

424. The Central Chin languages are Tashōn or Shunkla, Lai, with its dialect

Tashōn.

Language	Population returning it
Zahao	3,216
Lushēi	72,142
Banjōgi	560
Pankhu	113

Lakher, Lushēi, with its dialect Ngentē, Banjōgi, and Pankhu. They are all closely connected with the northern sub-group, but have a still greater affinity to the Old Kuki forms of speech. The Tashōns, who call themselves Shunklas, dwell in the country south of that inhabited by the Siyins and Sōktēs. To their west lie the Lushai Hills, and to their south the Lai country. They form a powerful tribe, and their country is the most thickly populated in the

Zahao
Lai

Chin Hills. There are probably several dialects of their language. We know at least one called Yahow or Zahao. The Laïs inhabit the middle portion of the Chin Hills, their name being said to mean "central." The Burmese call them "Baungshe," from their fashion of wearing a knot of hair over the forehead. Dialects of Lai are spoken by the surrounding tribes, and nearly all of them also understand the standard form of that speech. This is also the case with the Tashōns, so that Lai is an important language for the purposes of administration, and has been illustrated in a grammar prepared by Major Newland. Lakher, a dialect of Lai, is spoken in the south of the Lushai Hills. Its speakers are called Zao by the Chins. They are an offshoot of the Tlantlang Laïs, whom the British first met on the Arakan and Chittagong frontier, under the name of Shendoos.

Lakher

Lushēi.

425. As Lai bids fair to become the *lingua franca* of the Chin Hills, so Lushēi has become that of the Lushai Hills. This tract has been the scene of various migrations, new tribes at different times pushing the former inhabitants westwards and northwards. The Lushais, who are now the prevailing race, seem to have begun to move forwards from the south-east about the year 1810. Between 1840 and 1850, they obtained final possession of the North Lushai Hills, having pressed the former possessors, the Thādos, before them into Cachar. In 1849, they made a raid on a Thādo village in that district, and for the first time came into contact with us and found their northward progress finally stopped. Our subsequent relations with them are a matter of history. Their name is commonly spelt "Lushai," but the proper mode, which is employed when speaking of their language, is "Lushēi." They usually call themselves "Dulien" and their language "Dulien long." The latter has several dialects, of which the best known is Ngentē, spoken in parts of the South Lushai Hills, in the villages round Demagiri, and in some of the Western Howlong villages. Another is Pannai, spoken between the eastern border of the South Lushai Hills, and the Koladyne. Standard Lushēi is comparatively well known. Several grammars have been written of it, the most important being that of the pioneer missionaries, Messrs. Lorrain and Savidge, which is accompanied by a very full dictionary. Banjōgi and Pankhu are two unimportant languages spoken in the Chittagong Hill Tracts. Lushēi is the only language of this group for which separate figures, which are fairly accurate, are available.

Ngentē.

Pannai.

Banjōgi and
Pankhu

426. The languages classed as Southern Chin do not, save in two instances, fall within the scope of the Linguistic Survey of India, which does not extend to the Province of Burma. Very little is known about them, and of some we have nothing but meagre vocabularies. As elsewhere in this group separate figures are rarely available. The following may, with some confidence, be classed as belonging to the sub-group,—

Language.	Population
Yindu	48
Shö	414
Khāmi	24,868
Anu	775
That	67

Chinmē, Welaung, Chinbök, Yindu, Chinbön, Khyang or Shö, and Khāmi. To these may possibly be added the languages of some southern tribes, such as Anu, Kun, Pallaing, and Sak or That, which are mentioned in Census Reports and Gazetteers, but about whose languages I can find no information. Daingnet which is generally mentioned with these turns out to be really a corrupt form of Bengali. The Chinmēs, who inhabit the sources of the eastern Mön, are said to be a connecting link between the Lais and the Chinböks. The Welaung Chins inhabit the villages at the head waters of the Myittha River, and are bounded on the north by the Lais, and on the south by the Chinböks. The Chinböks live in the hills from the Maw River down to the Sawchaung. They are bounded on the north by the Lais and the Welaungs, on the east by the Burmans, on the west by the tribes of the Arakan Yomas, and on the south by the Yindu Chins. The Yindus are found in the valleys of the Salinchaung and the northern end of the Mön Valley. The Chinböns inhabit the southern end of the Mönchaung and stretch across the Arakan Yomas into the valley of the Pichaung. The Khyangs or Khyangs occupy the country on both sides of the Arakan Yomas. They are also found in the Chittagong Hill Tracts. This language has received some attention, and we have grammars and vocabularies by Major Fryer and Mr. Houghton, besides word lists by other writers. They are partially civilized, and are hence sometimes known as the "Tame Chins." They call themselves "Shö." The Khāmis, or as the Burmese nickname them "Khweymis," "dogs' tails," are found in the Chittagong Hill Tracts and along the River Koladyne in Arakan. They used to live in the Chin Hills, and only came to their present seats in the middle of the nineteenth century. We have several vocabularies of their language, and a short grammar published in 1866 by the Rev. L. Stilson.

427. This is not the place in which to explain the main points of differentiation which characterise the Kuki-Chin languages, but I may draw attention to one peculiarity which admirably illustrates the nature of the Tibeto-Burman construction. It is a well-known fact that none of these languages has developed a proper verb. The words which perform the functions of verbs are, in reality, verbal nouns denoting an action. They are therefore inflected like nouns, and the various tenses are formed by adding post-positions, or are compounds, the last part of which has the meaning of finishing, beginning, etc. This is peculiarly evident in the Chin languages. In most of them the verbs are never conceived in the abstract, but are always put in relation to some noun as the subject. This is effected in exactly the same way as with ordinary nouns, viz., by prefixing the possessive pronouns, so that the expression "my going" is used instead of "I go." Thus, in Lushēi, when we want to say "I am" we say *kā nī*, literally "my being;" and when we want to say "thou art," we say *i nī*, "thy being."

428. The Kachins, who are also called in Burma Chingpaw, and in Assam Singphö, i.e., "a man of the Kachin tribe," and hence "a man" generally, inhabit the great tract of country including the upper waters of the Chindwin and of the Irrawaddy, which lies to the east of Assam, and to the north, north-east, and north-west of Upper Burma. During the last fifty years they have spread a long way to the south into the Northern Shān States and the districts of Bhamo and Katha. They would probably have extended much further, if we had not annexed Upper Burma, when we did; and indeed at the present moment there are isolated

Province.	Population.
Assam	1,770
Burma	65,570
Total, Kachin	67,340
Add Kachin-Burma Hybrids	1,456
Other Hybrids	56,979
TOTAL, Kachin group	125,775

Kachin villages far down in the Southern Shān States and even beyond the Salwin River. Colonies of them appear to have entered Assam where they are known as Singphōs, about a hundred years ago. At any rate, their language shows that they must have come into that country after long contact with the Burmans. Philology and the traditions of their race alike point to the head-waters of the Irrawaddy as their original home, from which they have gradually extended, mainly along the river courses, ousting their immigrant predecessors, the Burmese and the Shāns. The language of the Kachins varies greatly over the large tract of country which they occupy. They are essentially a people of the hills, and almost every hill has got its peculiar form of speech. We may, however, divide all the dialects into three classes—the Northern, the Kaori, and the Southern Kachin. The Northern dialect, which we know best in the form in which it is spoken by the Singphōs of Assam, has been described in the grammatical sketches of Logan, Major (afterwards Brigadier-General) Macgregor, and Mr. Needham. Southern Kachin, which is that spoken in the Bhamo district, is illustrated by those of Messrs. Hertz and Hanson, while the Kaori dialect, which is the language of the Kaori Lepais, who inhabit the hills to the east and south-east of Bhamo, forms the basis of that written by Dr. Cushing. As regards the mutual relationship between Kachin and the other Tibeto-Burman languages, it may be said to occupy a somewhat independent position. In phonology it comes close to Tibetan; on the other hand, it is also intimately related to the Nāgā and Kuki-Chin languages, and to Burmese. Among the Nāgā languages, it shows the nearest affinities to those which form the Eastern sub-group. Of the Kuki-Chin languages, it shows remarkable points of resemblance to Meithei. Its relationship to Burmese has never been disputed. The inquiries made during the progress of the Linguistic Survey thus show that Kachin, without necessarily being a transition language, forms a connecting link between Tibetan on the one hand, and Nāgā, Meithei, and Burmese on the other.

429. Between Kachin and Burmese there are a number of transition tongues, some of them, no doubt, mere hybrids, about which little is at present known, and of which a bare enumeration must suffice. Nearly all of them are nearer to Burmese than to Kachin. The Lepais are the largest and most important of the Kachin tribes. Most of them speak the ordinary Kachin, and one of their septes has already been mentioned as using the Kaori dialect. The Asi or Szi Lepais, a half-breed sept whose head-quarters are in the hills near Mogaung, however, use one of these mongrel Kachin-Burmese forms of speech. Amongst them live the Lashis or Lechis, a hybrid race, speaking an allied hybrid tongue. Another closely connected dialect is that of the Marus, who, so far as known territory is concerned, frequent the borderland of Burma and China, particularly to the north-east of Talawgyi. The Hpōns, who have been described as "a mere sort of dish-clout, full of traces of their neighbours," appear to dwell only in the upper defile of the Irrawaddy between Bhamo and Sinbo and another valley in the neighbourhood. Finally, with this set of hybrid languages we may refer to the tongue of the people commonly known in Burma as the Maingthas. They have many other names, such as Achang, Ngachang, Ho Hsa, La Hsa, Fama, Taren, and Tareng. The Kachins claim them as cousins, but their language seems principally to be a mixture of Burmese and Shān, although in some respects it strongly resembles Lashi. They are found on the west border of the Chinese State of Shanta and in Khām-ti Long.

Hpōn (not returned).

430. In this connection, and before dealing with the Burmese group, we may mention here a few other apparently hybrid languages, which, while not closely related to Kachin, seem, so far as the meagre materials available show, to be connected with Burmese. The first is the dialect of the Lihaws or Yawyins, who are found chiefly in the neighbourhood of Sadōn and scattered in small villages at high altitudes throughout the Northern Shān States and Mōng Mit. Practically the same as it is the language spoken by the La'hus, whom we sometimes find referred to as Mu Hsō, Lohs, Law'he, Myen or Kwi. Their principal seat, so far as is known, is in the

Northern
Kachin
Southern
Kachin
Kaori.

Kachin-
Burma
Hybrids

Szi 750

Lashi 84

Maru 151

Maingtha 465

Lihaw 1,605

La'hu 16,732

Other
Hybrids.

country north of Mōng Lem between the Salwīn and the Mé-khōng. There are also colonies of them scattered through the Shān States of Kōngtung and Kēngcheng. The Akhas are probably the most numerous and widely distributed of the hill tribes of Kōngtung. Their language appears to be connected with La'hu and Lihsaw, but the resemblance is not very close. Very similar to it is that spoken by the Akō, who also dwell in the same State, and we have short vocabularies of the languages of two trans-frontier tribes, the Li-sus and the Mu-sus, which seem to belong to this little sub-group. The Danus are an important tribe which inhabit the border line between the Shāns and the Burmans, and are a hybrid of the two nations, their present speech being a form of Burmese with a great admixture of foreign words. Their language is to be distinguished from that of the Danaws, which seems to be connected with Karen, or, possibly, with Palaung and Wa. No speakers of Danu have been returned. Another tribe, of half-breeds is the Kadus, who are mainly a mixture of Burman and Shān, like the Danus, but also show traces of Chin and, perhaps, Kachin blood. If they ever had a language of their own, it is now extinct, or has been so much modified by all its neighbours, as to be little better than a kind of Yiddish. Intha, spoken round Fort Stedman in the Southern Shān States and Karenni, is a Burmese largely diluted with Shan. Its speakers are said to have come from Tavoy. It is spoken by 5,851 persons, and these figures form part of the total given in the tables for Burmese.

21,175
1,162
18,300
5,851

Li-su and
Mu-su
Danu

431. We are now led naturally to the Burma group of the Tibeto-Burman languages. In dealing with the general question of the distribution of these forms of speech, I have explained how it is most probable that the Kuki-Chins and the ancestors of the present Burmese left their original seat on the upper waters of the Chindwin and of the Irrawaddy as one horde. The Kuki-Chins separated from the others, and left the Burmans to continue their way southwards. We have to record another language which also probably left the main stock after the Chins, but before the Burmese language had fully developed,—that of the Mrūs. Mrū is a puzzling language in many particulars. In the main, it follows the phonetic system of Burmese, and yet it sometimes differs from it in essential points. We find in it forms which are paralleled not only (and most frequently) by those which we meet in Kuki-Chin, but even by the construction of Bodo and Nāgā forms of speech. Unfortunately, the materials available for studying Mrū are most incomplete, and, till more are available, it is best to class it provisionally as an independent form of what is now the Burmese language. This explains its apparent peculiarities, and is at the same time consonant with the traditions of the tribe, whose members maintain that they came into their present seats in the hill tracts of Chittagong and Arakan before the other Burmese-speaking inhabitants.

5,851

432. The majority of the dialects belonging to the Burma group proper are almost unknown, except, in some cases, to local officials. The only one which has been widely studied is the classical language of Burmese literature as it is spoken by educated Burmese. The written language is the same everywhere in the tract where it is the standard, but the local pronunciation varies greatly. Our information on this latter point is, however, almost entirely limited to the dialect spoken in Arakan. The Arakanese branched off from the main Burmese stock at an early date, and have had relatively little intercourse with them since that period, communication having been barred by an intermediate mountainous tract of country. Their language has therefore developed upon lines of its own, and in many respects it differs widely from the standard form of speech. It is well known that the orthodox pronunciation of the latter is extremely dissimilar from that indicated by the written language. In other words, the development of the spoken language has proceeded more rapidly than that of the written one, and the latter represents the older form. One of the proofs of this is that the pronunciation of Arakanese frequently agrees with that of Burmese as written, and not as it is

Burma
Group

Language.	Population returning it
Mrū	23,898
Burmese	7,474,896
TOTAL, Burma group	7,498,794

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Mrū

Burmese

Arakanese 383,403

spoken. Arakanese is not only spoken in Arakan but also in Chittagong and Backergunge, where its speakers are known as Maghs and their language as Maghi. The Burmans of Pegu call the Arakanese Rakhaing-tha, i.e., "sons of Rakhaing (Arakan)." The only other speakers of Burmese out of Burma itself are scattered in small colonies in different parts of India or in the Andamans, most of them being prisoners, political or criminal.

433. Other dialects of Burmese are—Chaungtha, Yabaing, Tavoyer, and Taungyo. The first, spoken by the "sons of the river," is heard in Akhyab and the Arakan Hill Tracts. It is said to be a form of Arakanese. The Yabaings, who are settled on both sides of the Pegu Roma, are said to speak Burmese with a strong Arakanese accent. We have no figures for this dialect. The inhabitants of the Yaw Valley in Pakokku are said to have a dialect of their own, but their language appears in the census tables as ordinary Burmese. The inhabitants of Tavoy maintain that they are descendants of Arakanese colonists, and their language is said to contain many Arakanese provincialisms. In the census returns it appears like Yaw, as standard Burmese. Taungyo is spoken by the tribe of that name in Myelat.	
Chaungtha	1,350
Yabaing	
Yaw	
Tavoyer.	
Taungyo	10,543

The Siamese-Chinese Sub-Family.

Chinese.	434. This sub-family consists of two groups, the Sinitic (including Karen), and the Tai. Chinese is not a vernacular of British India, although natives of the Flowery Land are found in nearly every large city as merchants, leather-workers, carpenters, cane-workers, and the like. In Rangoon and Upper Burma, there are considerable communities of them, but all are temporary immigrants, who are either merchants that have come by sea, or else people from Yunnan.	
	Group	Population returning it
	Sinitic	938,388
	Tai	836,210
	TOTAL, Siamese-Chinese Sub-family	1,774,598

Karen	Language	Population returning it
	Chinese	50,513
	Karen	887,875
	TOTAL, Sinitic group	938,388

Karen is a group of dialects, not of languages, for it includes only one language—Karen—spoken by the members of that tribe scattered over south Burma and the neighbouring portion of Siam. The generally accepted theory regarding the language is, that it is connected with Chinese, but not descended from it, and that the people are pre-Chinese. Where much is still doubtful, it

is hardly necessary to state that they have been identified by some with the lost Ten Tribes, and it is not actually impossible that they may have obtained certain of their traditions from early Jewish colonists in Northern China. From there they appear to have first emigrated to the neighbourhood of Ava, whence, about the fifth or sixth century, they came down southward and spread over the hills between the Irrawaddy, the Salwin, and the Mè-nâm as far as the seaboard. The language has three main dialects, the Bwè or Bgai of the north, and the Pwo and the Sgau of the south. A variety of Bgai is the Karen-ni or Red Karen, of Karen-ni in Upper Burma. Varieties of Pwo are Mopgha, Shanghipo, Taru, kai or Gaikho, and Taungthu, while under Sgau are included Maunhepaku and Wewa. The language of the Danaws (to be distinguished from the Danus) is apparently connected with Taungthu unless Mr. Lewis is right in classing it with Palaung and Wa, which belong to the Mön-Khmër sub-family.

435. The Tai race, in its different branches, is beyond all question the most widely spread of any in the Indo-Chinese Peninsula, and it is certainly the most numerous. Its members are to be found from Assam to far into the Chinese province of Kwang-si, and from Bangkok to the interior of Yün-nan. The history of its migration from Yun-nan into Southern Indo-China has been already briefly described. It remains to consider the various forms of speech used by the nations of which it is composed.

436. The Tai group consists of two languages, Siamese and Shân. They have

Language.	Population returning it.
Siamese	19,536
Shān proper	816,674
TOTAL, Tai group	836,210

Lü 19,380
Khün 42,160

Shān 753,262

however, no less than seven different written characters, and there are numerous dialects. The Siamese character, which was invented in the year 1125, is altogether different from the others. The language, so far as British India is concerned, is spoken principally in the Tavoy, Amherst, and Mergui districts of Burma. Lao, which is a dialect of Siamese, has an alphabet derived from that of Mōn, and closely related to it are the alphabets of Lü and Khün, dialects which are intermediate between Siamese and Shān, and which are spoken just north of the Siamese frontier in two of our Shān States.

Shān proper is spoken all over the Shān States, both British and Chinese, and as far north as Mogaung. It has a northern, a southern, and a Chinese dialect, the last having a slightly different character, which, like all the other Shān alphabets, is borrowed from the Burmese. The word 'Shān' is the Burmese pronunciation of 'Shām', which is the correct form. It probably re-appears in the final syllable of 'Assam.'

437. In the year 1228, just about the time when Kublai Khan was establishing himself in China, a Shān tribe, the Āhoms, entered the country now called Assam, where they settled themselves, and to which they ultimately gave their name. They gradually established their power, which reached its culminating point in their victory over the Kāchāris of Dīmāpur in 1540. This made them masters of the whole of the Assam Valley, and they continued to rule their territories with vigour and success up to the end of the seventeenth century, when they became infected with Hinduism. They lost their pride of race, their habits changed, and "instead of being like barbarians, but mighty Kshatriyas, they became, like Brāhmans, powerful in talk alone" They gradually declined in strength, and Assam, after being first conquered by the Burmese, was finally annexed by the British in 1824. So completely Hinduised did they become before their final fall, that their language has been dead for centuries, and is now known to only a few priests who have remained faithful to their old traditions. It possessed an important historical literature which is being investigated by the Assam Government. Āhom is an old form of the language which ultimately became Shān, and it is of great importance for the study of the mutual relationship of the various Indo-Chinese languages.

It is curious that, in spite of their long domination, the Āhoms have left so few traces of their influence on the languages of the Assam Valley. They appear to have been throughout comparatively few in number, and, as their rule extended over various tribes speaking different forms of speech, the necessity of a *lingua franca* soon became apparent. This could only have been either Āhom or Assamese. The latter, being an Aryan language, possessed the greater vitality, and its use was no doubt encouraged by the Hindū priests who acquired influence over the ruling race. That influence alone would not have been sufficient, for we see how in Manipur, where Hinduism was enthusiastically accepted, the people have still retained their own language, although the Brāhmans have had to invent a written character in which to record it. Although the Āhoms have left so few traces on the language of Assam, they have, however, made their mark upon its literature. One of the few Āhom words used at the present day is *buranji*, "the store of instruction for the ignorant," which they called history, and it is to them that Assam owes that historical sense which created the series of chronicles, still called by the old foreign name, that are the pride of its literature. From Assam to Kashmir is a long cry, and yet between these two countries, so far as we know at present, no deliberate original work of history has ever been written by an Indian in an Indian language which did not owe its inception to the influence or example of the Mughul writers of Delhi and Agra.

438. When Mogaung was captured by Alomphra, a number of Shāns migrated north, and settled here and there in the country round the upper courses of the Chindwin and the Irrawaddy. Their principal settlement was high up on the latter river in the country known as Khāmti Long or Great Khāmti-land.

Thence some of them were invited by their kinsmen, the Āhoms, and settled in Eastern Assam, where they ultimately ousted their former hosts. They have developed a slightly varying dialect of Shān, and have an alphabet of their own. Since then small numbers of other Shān tribes have migrated into Assam, who are known as Phākials, Norās, Tai-rongs (locally called Turungs), and Aitons. The last-named still speak Burmese Shān, and use that alphabet. The Tai-rongs were enslaved by the Kachins *en route*, and all, or nearly all, of them now speak Singphō. A few of them, together with the Norās and Phākials, speak a Shān dialect differing little, if at all, from Khāmṭi.

Phākial,
Norā, Tu-
iong, and
Aiton

Dialect	Population returning it
Khāmṭi	1,490 *
Phākial	289
Norā	2
Tai-rong	12
Aiton	1,569
TOTAL, Shān dialects of Assam	3,362

THE DRAVIDO-MUNDĀ FAMILY.

Dravidian
and Mundā
sub-families
The name
"Kolarian"

439. This family falls into two connected sub-families, the Dravidian and the Mundā. The Dravidian sub-family is well known. Of late years the Mundā sub-family has been called the "Kolarian," the name being used both for the languages and for the tribes which speak them. Mr. Risley has proved the non-existence of any such distinct race of men, the so-called "Kolarians" being simply members of the great Dravidian family, and modern researches have confirmed this view, if confirmation was necessary, by maintaining a relationship between the "Kolarian" and the Dravidian languages. The name "Kolarian" itself is objectionable. It was suggested first in the year 1866, although another name was already in the field, under the impression that the Kōls, one of the principal of these tribes, were somehow connected with Colar in Southern India, a thing which has yet to be proved; and it has the grave disadvantage of suggesting to everyone who is not a specialist that it has something to do with "Aryan"; that, in fact, the speakers of these languages are a mixture of Kōls and Aryans, which, of course, is far from the truth. The "Kolarian" languages were long before this recognised as a distinct group by the late Professor Max Müller in his *Letter on the Turanian Languages*, which was published in the year 1853. He then gave them the name of the "Mundā" family, after one of their principal forms.† That name should have been allowed to stand until it was shown to be unsuitable. I therefore adhere to it myself, in preference to the altogether fantastic "Kolarian" or the other name suggested by some eminent scholars in Europe—"Khervarian."

440 That a relationship exists between the Mundā and the Dravidian languages has of late years been accepted by many scholars, and, pending the completion of the Linguistic Survey, it is unnecessary to labour at the subject here. It will suffice to show the broad points of agreement and of disagreement between the two families or sub-families. The declension of nouns is very similar in both, and they both agree in having two genders, one for animate and the other for inanimate things, although Dravidian goes further in classing irrational beings as inanimate. Some of the pronouns are very similar, and both agree in having two forms each of the plural of the first personal pronoun. Many of the suffixes used in the conjugation of the verbs closely agree, both use the relative participle instead of a relative pronoun, and each has a true causal form of the verb. Both are polysyllabic and agglutinative, and both use the same order of words. The vocabularies show many important points of agreement. On the other hand, Mundā languages possess letters which are unknown in Dravidian; they count by twenties, while Dravidian languages count by tens; they have a dual, which Dravidian has not; but they have no negative voice, which Dravidian has. On the whole, the type of the Mundā languages, viewed morphologically, is older than that of the Dravidian ones. They apply the agglutinative system more completely and regularly, and show much less tendency towards euphonic change.‡

Mutual rela-
tionship of
the two sub-
families

* The Khāmṭi figures are included in those given above for Shān. The others are not.
† Logan, writing about the same time, or perhaps a year or two earlier, in the *Journal of the Indian Archæology*, classed the Mundā languages as North Dravidian, and treated them as forming a separate group which he named 'Kōl.' This name might be used instead of 'Mundā', but till Sir George Campbell's time the latter was, I think, the name most generally used.
‡ Since the above remarks were passed for the press, the Linguistic Survey has reached the Mundā languages. The result of the comparative examination of these forms of speech, which is now being made for the first time, will probably show that the Mundā and Dravidian Languages have not a common origin. The question is, however still *sub-judice*.

441. Experts are divided as to how the Dravido-Mundās entered India. Some maintain that the Dravidians came from the north-west, and, with regard to philology, point to coincidences occurring in the Scythian tablet of Darius Hystaspes at Behistūn and in some of the Dravidian languages, and also to the existence of a Dravidian language, Brāhūi, in Baluchistan. In regard to the former, it may be remarked that the points of disagreement are at least as important as those of agreement, and as for the latter, it proves nothing. Brāhūi may just as well be an advance guard from the south-east as a rear-guard from the north-west. Another theory, which has not received much acceptance of late, is that the Mundās entered India from the north-east. Finally, there is a contention, which agrees best with the facts of philology, that all the Dravido-Mundās came from the south. In dealing with the Mōn-Khmēr languages, I have fully discussed the remarkable points of continuity between them and those of the Mundā family, and late researches show equally striking instances of agreement between both the Mundā and Dravidian languages on the one side, and those of the aborigines of Australia on the other. The question is, however, one for ethnologists and not for philologists to settle. It may be added that efforts have of late been made to show a connection between the Chin languages and Tamil. That there are coincidences of vocabulary cannot be denied, but they must be accidental. It is impossible to postulate a close connection from such coincidences between two families of languages so entirely different in structure. Tibeto-Burman languages are radically monosyllabic, and Dravidian ones are not.

442. It cannot be doubted that languages belonging to the Dravido-Mundā group were once spread much more widely over Northern India than we now find them. Aryan civilization and influence have been too much for them. Even at the present day we see the absorption of aboriginal tribes by the Aryans going on before our eyes, and the first thing to yield seems to be the language. There are now many Dravido-Mundā tribes, which have not yet been received into the fold of the Aryan caste system, but whose members speak a broken patois of the nearest Aryan language, and have forgotten everything but a few words of their own proper speech. This has given rise to not a little confusion in linguistic researches. For instance, there are Gōnds who speak their own Dravidian language, and there are Gōnds who speak a broken Aryan one, but in both cases the dialects which they use are called by the same name—"Gōndī". There are thus two Gōndī languages, one an Aryan, and the other a Dravidian one. So also in the case of other tribes, and the common nomenclature based on tribal names has greatly complicated linguistic inquiries. There is even an instance on record in which some members of a Mundā tribe, the Khariās, have abandoned their ancestral language in favour of that of their Dravidian neighbours; while, on the other hand, a number of Dravidian Oraons have abandoned their own tongues for Mundāi, thus in both cases making confusion worse confounded. In the Deccan, which has been most preserved from Aryan influences, the Dravidians have kept their languages very fairly, but in Northern India, the only Mundā and Dravidian languages which have survived are those spoken in the hill country little accessible to Aryan culture and influence.

The Mundā Sub-Family.

443. As explained above, the Mundā, sometimes called the Kolarian, Sub-family is probably the older branch of the Dravido-Mundā languages. It exhibits the characteristics of an agglutinative tongue to an extraordinarily complete degree. The only other form of speech with which I can compare it in this respect is Turkī. What Professor Max Müller has said about that language applies with equal force to Santālī, the typical form of Mundā speech.

"It is a real pleasure to read a Turkish grammar, even though one may have no use to acquire it practically. The ingenious ways in which the numerous grammatical forms are brought out, the regularity which pervades the system of declension and conjugation, the transparency

Language	Population returning it
Santālī	1,790,521
Kōl	948,687
Korwā	16,442
Khariās	101,986
Jukng	10,863
Asur	4,872
Kōrā	28,878
Gadabā	37,230
Savara	157,136
Kōrkū	87,675
TOTAL, Mundā Sub-family	3,179,275

and intelligibility of the whole structure, must strike all who have a sense of that wonderful power of the human mind which has displayed itself in language. . . . We have before us a language of perfectly transparent structure, and a grammar the inner workings of which we can study, as if watching the building of cells in a crystal beehive. An eminent orientalist remarked 'We might imagine Turkish to be the result of the deliberations of some eminent society of learned men'; but no such society could have devised what the mind of man produced, left to itself in the steppes of Tartary, and guided only by its innate laws, or by an instinctive power as wonderful as any within the realms of nature. . . . The most ingenious part of Turkish is undoubtedly the verb. Like Greek and Sanskrit, it exhibits a variety of moods and tenses, sufficient to express the nicest shades of doubt, of surmise, of hope, and of supposition. In all these forms the root remains intact, and sounds like the key-note through all the various modulations produced by the changes of person, number, mood, and time. But there is one feature so peculiar to the Turkish verb that no analogy can be found in any of the Aryan languages, the power of providing new verbal bases by the mere addition of certain letters, which give to every verb a negative, or causative, or reflexive, or reciprocal meaning. In their system of conjugation, the Turkic dialects can hardly be surpassed. Their verbs are like branches which break down under the heavy burden of fruits and blossoms."

Agglutination in Munda languages

141. Nearly every word of the above applies with equal force to Santālī. Suffix is piled upon suffix, till we obtain words which, to European eyes, seem monstrous in their length, yet which are complete in themselves, and every syllable of which contributes its fixed quota to the general signification of the whole. One example of the use of suffixes must suffice. The word *dal* means "strike," and from it we get *dal-ochō-akan-tahē-tae-tiñ-a-e*, which signifies "he, who belongs to him who belongs to me, will continue letting himself be struck." If we insert the syllable *pa* in the middle of the root, so that we get *dapal*, the beating becomes reciprocal, and we have a fight, so that *dapal-ochō-akan-tahē-tae-tiñ-a-e* means "he, who belongs to him who belongs to me, will continue letting himself be caused to fight." Again, if we substitute *ako-an* for *akan*, the same pugnacious individual with a string of owners will, with less disinterestedness, continue causing to fight only for himself. The best idea of the enormous number of complex ideas which can thus be formed according to the simplest rules may be gained from the fact that the conjugation of the verb "to strike" in the third person singular alone, occupies nearly a hundred pages in Mr. Skrefsrud's Santālī Grammar.

Other characteristics of Munda languages

145. Among other characteristic features of the Munda languages we may mention the following. They contain four sounds, usually known as semi-consonants, the enunciation of which is checked and left incomplete, the breath being expired through the nose.* Although masculine and feminine nouns are distinguished, there are only two real genders, one for all animate and the other for all inanimate objects. Nouns have three numbers, a singular, a dual, and a plural, the dual and plural numbers being indicated by suffixing the dual or plural respectively of the third personal pronoun to the noun. Short forms of all the personal pronouns are freely used, in each case as verbal suffixes. The dual and plural of the first personal pronoun have each two forms, one including the person addressed, and the other excluding him. If, when giving orders to your cook you say, "we shall dine at half past seven," you must be careful to use *ale* for "we," not *abon*; or else you will invite your servant to the meal, which might give rise to awkwardness. Participial formations are used instead of relative pronouns, exactly as in Tibeto-Burman and Dravidian languages. "The deer which you bought yesterday" would be rendered "the yesterday deer bought by you." Roots are modified in meaning not only by suffixes but also by infixes, as in *da-pa-l* mentioned above. The logical form of the Munda sentence is altogether different from that of an Aryan one, and hence it is impossible to divide the language into the parts of speech with which we are familiar, say, in English. The nearest thing which it has to what we call a verb, merely calls up an idea, but is unable to make any assertion. The final assertion is made by

* Mr. Skrefsrud, who is, I believe, the only scholar who is familiar with both Bodo and Santālī, appears to consider these Munda semi-consonants as identical with the 'abrupt' tone of the Indo-Chinese languages.

one of the most characteristic features of Mundā Grammar, a particle known as "the categorical α ." By its form, the sentence first unites the represented ideas into a mental picture, and then, by a further effort, affirms its reality. In English we say "John came." A Santālī would first call up a picture of John having come, and then, by adding the categorical α , would assert that this picture was a fact. Hence this α is not used in sentences which do not contain a categorical assertion, *e.g.*, those which in English would contain a verb in the subjunctive or optative mood. Santālī, with what is really better logic, relegates subjunctive and relative to what may be called the incomplete verb in company with what are with us participles, gerunds, and infinitives, and forms the only complete and real verb by the addition of the categorical α .

446. As in the case of several Tibeto-Burman tribes, the names which we give to many Mundā ones are not those by which their members call themselves, but those which we have adopted from their Aryan-speaking neighbours. We also observe the same principle running through the names by which they do call themselves that is so common among the Tibeto-Burmans. Most of the tribes simply call themselves "men," the same word with dialectic variations, Kōl, Kōrā, Kōr-kū (simply the plural of Kōr), Hōrō, Hor, or Hō, being used nearly universally. The Indian Aryans have adopted in one case the word "Kōl," as a sort of generic term for any of these non-Aryan tribes, and have identified the word with a similarly spelt Sanskrit one meaning "pig," a piece of etymology which, though hardly according to the ideas of European science, is infinitely comforting to those that apply it. The Rāj of these Kōls is a subject of legend over large tracts of the south side of the Gangetic valley, where not one word of Mundā origin has been heard for generations. The name is perhaps at the bottom of our word "coolie," and of the names of one or more important castes which would indignantly deny their Mundā origin.

447. The present stronghold of the Mundā languages (the *people* are spread much wider) is the north-east of the central plateau of India. The hills of the Sonthal Parganas, Chota Nagpur, Orissa, Chhattisgarh, and North-East Madras are full of tribes speaking various forms of the Mundā tongue, mixed here and there with advance colonies of people whose speech is Dravidian proper. There are also many in the plains districts at the foot of these mountains, so that in North-Eastern India they cover a large tract of country. Crossing the Central Provinces, the mountains of which are mainly occupied by Dravidian tribes, we find the Kōrkūs, also speaking a Mundā language, at the north-west end of the plateau, where Berar and the Central Provinces meet. Here also we meet the Bhils, who have so often been credited with speaking a Mundā language. It is possible that they once did so, but, so far as I can ascertain, they now all speak a broken Gujarātī, a broken Marāthī, or a broken Hindī, according to the locality where they happen to live. It may be that there are tribes which have still retained the language of their forefathers. They have not, however, yet been discovered. Here also may be mentioned once for all a number of so-called Mundā languages found in the Chhattisgarh country, Baigā, Bhinjā, Bhunjā, and the like, which are really the names of clans or of groups of exorcists, who have abandoned their original language, Mundā or Dravidian, and now talk a broken patois of the local Chhattisgarhī.

Mundā languages are also widely spoken in North-Eastern Bengal and Assam. People who use them are largely employed as coolies in both tracts, especially in tea gardens. A colony of them has also been settled in Assam for some years, consisting of emigrants led thither by the missionaries who have so successfully worked amongst them in their own home. Mundās as a body make excellent labourers, and show no reluctance to leave their native country for work at a distance.

Fully eleven-twelfths of the Mundās of Western Bengal and Chota Nagpur fall under one or other of the two great nationalities of Santāls and Kōls. The former occupy mainly the north and east, and the latter the south. The matter has, however, been somewhat complicated by the fact that some Santāls are wrongly called Kōls.

448. The head-quarters of Santālī are, naturally, the Sonthal Parganas, north-east of the Chota Nagpur plateau, at the eastern end of that great range of hills which extends right across India as far as Mount Abu; but the language covers a much larger tract of country. To the north there are numbers of its speakers in Bhagalpur and Monghyr, and to the east we find it in the districts of Birbhum and

Murshidabad. It extends much further south, through Manbhum, Bankura, Burdwan, Midnapur, and eastern Singhbhum, right into the Orissa Tributary States. Only to the west do we find but few speakers. There are some in the parts of Hazaribagh near the Sonthal Parganas, and (if local returns are correct) an overflow from the Orissa Tributary States into the State of Raigarh, which belongs politically to the Central Provinces. It is called by various names. The proper spelling of the word which we pronounce as Santāl is said to be Sāontār, and in addition to this we have Mānjhī, Thār, and, the name by which the people call

themselves, Hor or "men." The language has two or three dialects, differing slightly from the standard, the principal of which are Mahli and Kārmāli. Both are mostly spoken in the Sonthal Parganas and Manbhum, and the latter is also incorrectly called "Kōl" by many writers, its speakers being wrongly classed as Kōls at the last Census. It is said to be a form of Santālī, and, so far as our present information goes, neither it nor the people who use it have any but the most distant connection with the Kōls of Central and South Chota Nagpur.

Santālī has received much grammatical study. The first works of importance were written by the Norwegian missionaries of the Sonthal Parganas, amongst which Mr. Skrefsrud's grammar is still the leading authority on the language. The Free Church missionaries of Manbhum have also produced some useful elementary works, and an excellent dictionary is now issuing from their press. Nor have officers of Government been idle. We have an English-Santālī dictionary from the pen of Mr. Martin, and the late Mr. John Boxwell wrote the first scientific examination of the language, an account which for insight and clearness has never been superseded. In Europe the Danes, headed by Professor Thomsen of Copenhagen, have made a special study of this speech from the point of view of comparative philology. There are several Santālī versions of the New Testament and of a portion of the Old.

449 The Kōl language has its home in Central and South Chota Nagpur and in the neighbouring portions of the Orissa Tributary States and of Chhattisgarh.

It has two main dialects, Mundārī and Hō, the former of which is spoken to the north, mainly in Ranchi and Palamau, while Hō is spoken to the south in Singhbhum and the neighbourhood. Mundārī, which its speakers call Hōrō, has also received considerable attention from the missionaries who work among the tribe. The Church of England, the German Evangelical Mission, and the Church of Rome have all contributed to our knowledge. It should be noted that the Dravidian Oraons in a part of the district of Ranchi have abandoned their own language and speak a form of Mundārī known

as Hōrōhā Jhagar. Hō, or, as it is often called, Kōl, is the dialect of the Larikā or Fighting Kōls, whose principal seat is the district of Singhbhum and the Tributary States to its south. It closely resembles Mundārī, the main difference being one of pronunciation. As we see from its name, Hō frequently drops a final *r* at the end of a word. Of the other Kōl dialects the most important is Bhumij (with a sub-dialect, Tāmuriā), spoken in the same country as Kōl.

There is also Birhōr, the language of the "men of the forest," spoken in Chota Nagpur. The Turiās of Chota Nagpur and Sambalpur are said to speak yet another dialect. People known as Kōls are found living as far west as Banda in the United Provinces, but beyond the frontiers of Chota Nagpur they have ceased to speak their proper language, and use the ordinary Hindi dialect of their Aryan neighbours. The New Testament and portions of the Old

have been translated into Mundārī.

150. The only other considerable tribes of Western Bengal who speak Mundā languages are the Korwās, the Khariās, and the Juāngs. The Korwās, who

Mahli
Kārmāli

"Kōl"

Dialect	Population returning it
Standard	1,726,557
Mahli	18,801
Kārmāli	17,342
Not specified	27,821
TOTAL, Santālī	1,790,521

Kōl

Mundārī.

Dialect	Population returning it
Mundārī	440,794
Hō	371,860
Bhumij	111,304
Birhōr	526
Turiā	3,860
Not specified	20,323
TOTAL, Kōl	948,667

Hō

Bhumij,
Tāmuriā

Birhōr

Turiā

Sub dialect	Population returning it
Bhumij	108,732
Tāmuriā	7,572
TOTAL, Bhumij	111,804

Korwā.

Dialect	Population returning it
Korwā	15,882
Singli	178
Not specified	387
TOTAL, Korwā	16,442

appear to be related to the Mundās, inhabit the west of Chota Nagpur, especially the States of Sirguja and Jashpur, the Dewan of the latter being a member of the tribe. They are even found in that part of the district of Mirzapur which lies south of the Sōn, being the only Mundā tribe speaking a Mundā language in the United Provinces. Here their language is called Korwārī. Singli or Erngū is said to be a dialect of Korwā. The Khariās are much scattered. Their chief home is in the Ranchi district, but they are also found eastwards as far as Birbhūn, westwards over the greater part of Chota Nagpur, and southwards in Sambalpur and in the adjoining Tributary States of Ohhattisgarh and Orissa. They do not all use their own language. In Manbhūm they speak a broken Bengali, while in the Orissa Tributary States some of them at any rate use a Dravidian form of speech. The Juāngs or Patuās of the States of Kconjhar and Dhenkanal in Orissa speak a language which is said to be closely allied to Khariā, although it has borrowed largely from Oriyā. They are probably the lowest in the scale of civilization of all the Mundā tribes. Till quite recently the women of the tribe did not even sew fig leaves together to make themselves aprons. A bunch of leaves tied on in front and behind was all that was claimed by the most exacting demands of fashion, and this costume was "renewed as required, when the fair wearer went to fetch cattle from the wood, which provided her millinery." Attempts have of late been made to introduce the wearing of loin-cloths, with what success I am unaware. Other minor tribes of the eastern Mundās are the following: Āsur or Agariā, with a dialect called

Dialect	Population returning it
Āsur	3,126
Agariā	328
Birjiā (Chota Nagpur)	1,377
" (Central Provinces)	46
TOTAL, Āsur	4,872

Birjiā or Kōrānti, is spoken by wild tribes of Ranchi, and an Āsur grammar has been written by Dr. Hahn. Agariā is said to be the same language. Kōrā is spoken in Manbhūm, Bankura, and the Orissa Tributary States. It is also said to exist in Sambalpur and the neighbouring Feudatory States, where a language called Kisān has been identified with it. Kisān is spoken by many thousand people in that part of the country, but the specimens of it which I have seen are really specimens of Kurukh, a Dravidian, not a Mundā, language. We are not

entitled to assert from this that Kisān is always a Dravidian language, for, like Khariā, some members of the tribe may have changed their language for another. Indeed, Kisān, which merely means 'cultivator,' may not be a real language at all, but may connote simply the language of cultivators just as 'Kōrā' or 'Kōdā' is by some considered to mean 'digger,' and to have nothing to do with the Mundā word meaning 'man.' For these reasons, the speakers of Kisān and Kōdā in the Central Provinces have been shown under the head of Kurukh. The matter is further complicated by the fact that in many cases the Kōrās have been confounded with the Kōrwās, who are an altogether different tribe, speaking a different language. The most southerly forms of Mundā speech are those spoken by the Savaras and Gadabas of North-East Madras. The former have been identified with the Suari of Pliny and the Sabaræ of Ptolemy. A wild tribe of the same name is mentioned in Sanskrit literature, even so far back as in that of late vedic times, as inhabiting the Deccan, so that the name, at least, can boast of a great antiquity.

451. Crossing India we find in the western districts of the Central Provinces and in the neighbouring portion of Berar the Western Mundā language called Kōrkū. We have a short grammar of this language and a translation into it of the Gospel of St. Mark. There are people also called Kōrkūs, in the west of Chota Nagpur in the country overlooking Baghelkhand, but, so far as my inquiries extend, they now all use an Aryan language, and whether they are really the same tribe as the Kōrkūs of the Berars I do not know. The Western Kōrkū is said to have two dialects, Muāsī and Nihālī. The former is spoken in Chhindwara. As for Nihālī, it appears to have died out in the Berars, where it used to be a

Dialect	Population returning it
Kōrkū	81,263
Muāsī	6,412
TOTAL, Kōrkū	87,675

* The home of its speakers is in the west of the Pachmarhi Hills and in the Betul district of the Central Provinces. The Berar Kōrkūs are mainly found in the Melghat taluk of Ellichpur, which is geographically a part of Betul.

fairly important language. Specimens have been obtained from Nimar in the Central Provinces, which have a Mundā basis, but are largely mixed with Dravidian.

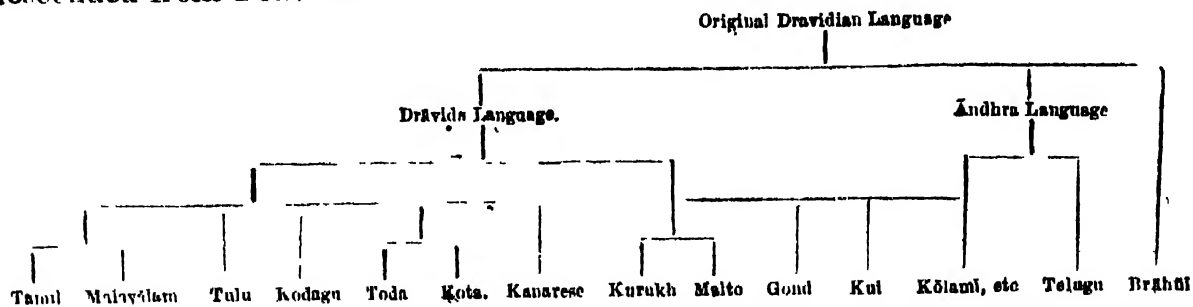
The Dravidian Sub-Family.

452. Of much greater importance than their Mundā cousins in regard to the number of their speakers are the languages which are known as Dravidian. Broadly speaking, they form the speech of the south of the Indian peninsula, as

Language	Population returning it
Tamil	16,525,500
Malayālam	6,029,304
Telugu	20,696,872
Kanarese	10,365,047
Kodagu	39,191
Tulu	535,210
Toda	805
Kota	1,300
Gōnd (including Kōlami)	1,125,479
Kandh	494,099
Kurukh	591,886
Malhar	465
Malto	60,777
Brāhūi	48,589
TOTAL, Dravidian Sub-family	50,514,524

contrasted with the Aryan languages of the north. The northern limit of this southern block of Dravidian languages from this point of view may roughly be taken as the north-east corner of the district of Chanda in the Central Provinces. Thence, towards the Arabian Sea, the boundary runs south-west to Kolhapur, whence it follows the line of the Western Ghats to about a hundred miles below Goa, where it joins the sea. The boundary eastwards from Chanda is more irregular, the hill country being mainly Dravidian, with here and there a Mundā colony, and the plains Aryan. Kandh, which is found most to the north-east, is almost entirely surrounded by Aryan speaking Oriyās. Besides, however, this solid block of Dravidian speaking country, there are islands of languages belonging to the family far to the north in the Central Provinces and Chota Nagpur, even up to the bank of the Ganges at Rajmahal.

Most of these are rapidly falling under Aryan influences. Many of the speakers are adopting the Aryan caste-system, and with it broken forms of the Aryan language, so that there are in this tract numbers of Dravidian tribes to whose identification philology can offer no assistance. Finally, in far-off Baluchistan, there is Brāhūi, concerning which, as already stated, there have been many discussions as to whether it is the advance guard or the rear guard of Dravidian migration. The following table shows the relationship, which exists between the various Dravidian languages. Sanskrit writers divided the speeches of Southern India into two, which they named “Āndhra” and “Drāvida” respectively. This division is well borne out by the present conditions of the existing vernaculars. Āndhra was the parent of Telugu. Kōlami, Kui, and Gōnd are intermediate languages, and, except Brāhūi, all the others are descended from Drāvida :



453 The Dravidian languages are polysyllabic and agglutinative, but do not possess anything like the wonderful luxuriance of agglutinative suffixes which we have noticed as distinguishing the Mundā family. They represent, in fact, a later stage of development, for although still agglutinative, they exhibit the suffixes in a state in which they are beginning to be modified by euphonic considerations, dropping letters in one place and changing vowels in another. The suffixes, however, though thus sometimes losing their original form, are still independent and separable from the stem-word, which itself remains unchanged. The following general account of the main characteristics of the Dravidian forms of speech is taken with one or two verbal alterations from the Manual of the Administration of the Madras Presidency :—

“ In the Dravidian languages all nouns denoting inanimate substances and irrational beings are of the neuter gender. The distinction of male and female appears only in the pronouns of the third person, in adjectives formed by suffixing the pronominal terminations, and in the third person of the verb. In all

other cases the distinction of gender is marked by separate words signifying 'male' and 'female.' Dravidian nouns are inflected, not by means of case terminations, but by means of suffixed postpositions and separable particles. Dravidian neuter nouns are rarely pluralised. The Dravidian dative (*ku*, *ki*, or *ge*) bears no analogy to any case termination found in Sanskrit or other Indo-European languages. Dravidian languages use postpositions instead of prepositions. In Sanskrit adjectives are declined like substantives, while in Dravidian adjectives are incapable of declension. It is characteristic of Dravidian languages in contradistinction to Indo-European, that, wherever practicable, they use as adjectives the relative participles of verbs, in preference to nouns of quality, or adjectives properly so called. A peculiarity of the Dravidian dialects is the existence of two pronouns of the first person plural, one inclusive of the person addressed, the other exclusive. The Dravidian languages have no passive voice, this being expressed by verbs signifying 'to suffer,' etc. The Dravidian languages, unlike the Indo-European, prefer the use of continuative participles to conjunctions. The Dravidian verbal system possesses a negative as well as affirmative voice. It is a marked peculiarity of the Dravidian languages that they make use of relative participial nouns instead of phrases introduced by relative pronouns. These participles are formed from the various participles of the verb by the addition of a formative suffix. Thus, 'the person who came' is in Tamil literally 'the who-came.'"

454. The relationship of the Dravidian to the so-called Turanian languages is a complicated question. Dr. Caldwell long ago pointed out points of resemblance between these two families, and more especially between the Dravidian languages on the one side and the Finnish, Hungarian, and Turkish languages on the other. This, however, is not the place to enter upon the discussion of so large a subject. We must content ourselves with pointing out the vast questions which it raises. If the theory is correct (and I may say at once that, personally, I do not accept it), it *might* lead us to look upon the Dravido-Mundā languages as forming a connecting link between that of Finland and those of Australia. The audacity of philologists could hardly go further than this, and yet there is something to be said in favour of the relationship on both sides of the connecting family. Relationship with Non-Indian languages

455. Little can be added to what has been written in previous census reports regarding the various Dravidian languages. What follows is mostly a repetition of well-known facts in words that have been used before. The first language to be mentioned is Tamil, not because it is numerically or geographically the most important, but by reason of its being the most cultivated and the best known of the Dravidian forms of speech. It covers the whole of Southern India up to Mysore and the Ghāts on the west, and reaches northwards as far as the town of Madras, and beyond. It is also spoken as a vernacular in the northern part of the island of Ceylon, while most of the emigrants from the Peninsula to British Burma and the Straits Settlements, the so-called Klings or Kalingas, have Tamil for their native language; so also have a large proportion of the emigrant coolies who proceed from Madras to Mauritius and the West Indies. In India itself, Tamil speakers, principally domestic servants, are found in every large town and cantonment. The Madras servant is usually without religious prejudices or scruples as to food, headgear, or ceremonial, so that he can accommodate himself to all circumstances, in which respect he is unlike the Northern Indian domestic. Tamil, which is sometimes called *Malabar, and also, by Deccan Muhammadans and in the West of India, Arava, is a fairly homogeneous language. Only some petty dialects such as Irula, Irula, Kasuva, and Yerukala have been reported. The first two are the dialects of small tribes in the Nilgiris, and the last, which is also known as Korchi or Korava, is used by a clan of vagrants, and will be dealt with under the head of gipsy languages. Malasar is a corrupt Tamil spoken by a forest tribe which inhabits the northern slope of the Anamullay range. Standard Tamil itself has two forms, the Shen (*i.e.*, perfect) and the Kodum or Codoon (*i.e.*, rude). The first is the literary language used for poetry, and has many artificial features. Codoon Tamil is the

Dialect	Population returned in Madras and Coorg
Irula	982
Kasuva	241
Yerukala	44,768

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style used for the purposes of ordinary life. Ancient Tamil had an alphabet of its own, the Vatteluttu, i.e., 'round writing,' while the modern language employs one which is also in its present form very distinctive, and which can be traced up to the ancient Brahmi character used by Asōka, through the old Grantha alphabet used in Southern India for Sanskrit writings. The Vatteluttu is also of North Indian origin.

The modern Tamil character is an adaptation of the Grantha letters which corresponded to the letters existing in the old, but incomplete, Vatteluttu alphabet, from which, however, a few characters have been retained, the Grantha not possessing the equivalents. Like the Vatteluttu, it is singularly imperfect considering the copiousness of the modern vocabulary which it has to represent. Tamil is the oldest, richest, and most highly organised of the Dravidian languages; plentiful in vocabulary, and cultivated from a remote period.

Malayālam

456. Closely connected with Tamil is Malayālam, the language of the Malabar coast. Its name is derived from *mala*, the local word for "mountain," with a termination which some explain as meaning "district," and others as meaning "sudden slope." It is a modern offshoot from Tamil, dating from, say, the ninth century. In the seventeenth century it became subject to Brahmanical influence, received a large infusion of Sanskrit words, and adopted the Grantha instead of the Vatteluttu character for its alphabet. From the thirteenth century the personal terminations of the verbs, till then a feature of Malayālam as of the other Dravidian languages, began to be dropped from the spoken language, and by the end of the fifteenth century they had wholly gone out of use except by the inhabitants of the Laccadives and by the Moplahs of South Kanara, in whose speech remains of them are still found. The Moplahs, who as Musalmāns had religious objections to reading Hindū mythological poems, have also resisted the Brahmanical influence on the language, which with them is much less Sanskritised than amongst the Hindūs, and, where they have not adopted the Arabic character, they retain the old Vatteluttu. Malayālam has

Yerava

Yerava . . . 13,175

a large literature, principally, as explained above, Brahmanical. It has one dialect, the Yerava,

spoken in Coorg.

Telugu

Telugu, as a vernacular, is more widely spread than Tamil. It occupies practically the whole of the east of the peninsula till it meets Tamil on the south. To the north it reaches to Chanda in the Central Provinces, and, on the coast of the Bay of Bengal, to Chicacole, where it meets Oriyā. To the west it covers half of the Nizam's dominions. The district thus occupied is the Andhra of Sanskrit geography, and was called Telingana by the Muhammadans. Speakers of the language also appear in the independent territory of Mysore and in the area occupied by Tamil. Only on the west coast are they altogether absent. The Telugu or Telinga language ranks next to Tamil in respect to culture and copiousness of vocabulary, and exceeds it in euphony. Every word ends in a vowel, and it has been called the Italian of the East. It used to be named the Gentoo language from the Portuguese word meaning "gentile," but this term has dropped out of use amongst modern writers. It employs a written character which, like that of Tamil, is derived from the Brāhmī alphabet of Asōka, but by an altogether different line of descent, as its pedigree comes down through the Vengi and Chālukya scripts of the seventh century A.D. The Kanarese alphabet has the same origin, and the two were identical in the thirteenth century, but since then a marked divergence has arisen, which has increased since the introduction of printing in the course of the nineteenth century. Neither of these characters has been limited by the number of letters in the old Vatteluttu alphabet, as was the case with Tamil, and hence they are as full and complete as that of Malayālam or of any of the alphabets used for writing Sanskrit. The curved character of the letters is a marked feature of both, and this is due to the custom of writing with a stylus on palm-leaves, which a series of straight lines would inevitably have split along the grain. Telugu has borrowed many words from Sanskrit, and has a considerable literature. It has no proper dialects, unless we can call by that name a few tribal corruptions of the standard language such as Kōmtāū, spoken in the Central Provinces, and Yānādi and Chentzu in Madras. There are also Gipsy tribes, such as the Kaikādīs and the Waddars, whose members use a deformed kind of Telugu. As a Dravidian language,

Kōmtāū,
Yānādi, and
Chentzu.
Gipsy
corruptions

Kōmtāū

. . . 3,490

Telugu occupies a somewhat independent position in regard to the others. This was clearly recognised by the old San-krit writers, who called it "Āndhra," in contradistinction to the other languages of Southern India, which they grouped together under the name of "Drāvida."

457. The true centre of the Kanarese-speaking people is Mysore. The historic "Carnatic" was for the most part on the Deccan plateau above the Ghāts. It is also spoken in the south-east corner of the Bombay Presidency, and occupies a strip of the coast between Tulu and Marāthī. Above the Ghāts, it stretches eastwards well into the Nizam's territory, and northwards to beyond the Kistna. The character used for writing and printing Kanarese is, as stated above, closely connected with that employed for Telugu, but the language itself possesses greater affinity to Tamil. The ancient Kanarese alphabet, known as Hala-kannada, which was the same as the contemporary Telugu one, dates from the thirteenth century, and in it is preserved an ancient form of the language, analogous to that of literary Tamil, and nearly as artificial. Up to the sixteenth century Kanarese was free from any admixture of foreign words, but since then the vocabulary has been extensively mixed with Sanskrit. During the supremacy of Haidar Ali and Tippu Sultan, Urdū words were largely imported into it from Mysore, while it borrowed from Marāthī on the north-west and from

Dialect.	Population returning it in Madras and Coorg	Telugu on its north-east. Dialects of Kanarese are Badaga, Kurumba, and Kodagu. The first two are spoken in the Nilgiri Hills. The Badaga tribe, called by our early historians the <i>Burghers</i> , speak a language which closely resembles old Kanarese. The dialect of the forest tribe of Kurumbas or Kurubas is a corruption of Kanarese with an admixture of Tamil. Kodagu or
Badaga	34,229	Badaga
Kurumba	9,200	Kurumba

Coorgi is by some classed as an independent form of speech. It is the language of Coorg, and is described by Bishop Caldwell as standing about midway between old Kanarese and Tulu. In the Census returns it is treated as a distinct language.

458. Tulu, immediately to the south-west of Kanarese, is confined to a small area in or near the district of South Canara in Madras. The Chandragiri and the Kalyānapūrī Rivers in that district are regarded as its ancient boundaries and it does not appear to have ever extended much beyond them. It is a cultivated language, but has no literature. It uses the

Dialect.	Population returning it in Madras	Kanarese character. Bishop Caldwell describes it as one of the most highly developed of the Dravidian tongues. It differs far more from its neighbour Malayālam than Malayālam does from Tamil, and more nearly approximates the Kodagu dialect of Kanarese. It is said to have two dialects, Koraga and Bellara.
Koraga	8,141	Koraga and Bellara
Bellara	196	

459. The remaining languages of the Dravidian tract proper are Toda and Kota, both spoken by wild tribes in the Nilgiris. By some they are considered to be dialects of Kanarese, but Bishop Caldwell maintains that they are distinct languages. Toda has received a good deal of attention, mainly because its speakers are within easy reach of Ootacamund. The Kotas are another tribe lower in position and occupation than the Todas. Todas and Kotas are said to understand each other's language. The number of speakers of each is very small, and the tongues have only survived through the secluded positions of the tribes.

460. We now come to the scattered Dravidian languages of Northern and Western India. The best known of these is Gōnd, spoken mainly in the Central Provinces, but overflowing into Orissa, North-Eastern Madras, the Nizam's territories, Berar, and the neighbouring portions of Central India. Its chief peculiarity is usually said to be an elaborate conjugational system, but this is more apparent than real. The Linguistic Survey shows that it has a common ancestor with Tamil and Kanarese, and that it has little immediate connexion with its neighbour Telugu. The language is popularly known as "Gōndī," which means only "the language spoken by Gōnds," and, as many Gōnds have abandoned their ancestral tongue for that spoken by their Aryan neighbours, it is often impossible from the mere name alone to say what

language is connoted by it. For instance, there are many thousands of Gonds in Baghelkhand, who have been reported to the Linguistic Survey as speaking Gōndī, but this, on examination, turns out to be a broken form of Baghēli. Similarly, the Gōnd Ōjhās of Chhindwara, in the heart of the Gōnd country, speak what is called the Ōjhī dialect, but this is also a jargon based on Baghēli. Until, therefore, all the various forms of alleged Gōndī have been systematically examined, great reserve must be used in speaking of the Gōnd language as a whole. That, however, there is such a language, that it is Dravidian, and that it is spoken by many thousands of people, there is not the slightest doubt. The language is usually said to have numerous dialects of which the following are the principal: Mārī or Mariā and Pārjī, both spoken in the Bastar State. Gattu or Gotte, the former being said to be the correct spelling, is the language of the Hill Kōis, and is found in Chanda, Vizagapatam, and Godavari, and the related Kōi or Kōyā, in the same locality, as well as in Bastar and the Nizam's territories. None of these, however, are real dialects. The true Gōnd language is the same everywhere, and all that can be said is that, as we go east and south it is more and more mixed with the neighbouring Telugu. In Chanda and the Nizam's territories we have Naikī, and in Berar Kōlamī and Ladhādī. Naikī and Kōlamī are closely connected, and differ considerably from the other Gōnd dialects. They will be classed as forming an independent language when the Linguistic Survey finally disposes of them. Ladhādī is now so mixed with Aryan elements that its final classification is at present doubtful. Gōnd has no literature and no character of its own, but the Gospels and the book of Genesis have been translated into it. There are several grammatical sketches and vocabularies of the various dialects.

Mārī, Pārjī.

Gattu

Kōi

Naikī.

Kōlamī
Ladhādī

Dialect	Population returning it.
Mārī	59,749
Pārjī	8,833
Gattu	5,494
Kōi	8,144
Kōlamī	1,505
Unspecified	1,041,754
TOTAL, Gōnd	1,125,479

Kandh

461 Kandh, as the Oriyās call it, or Kui, as its speakers call themselves, is the language of the Khonds of the Orissa Hills and the neighbourhood. It is unwritten and has no literature, but the Gospel of St. Mark and one book of the Old Testament have been translated into it, the Oriyā character being employed to represent its sounds. The language is much more nearly related to Telugu than Gōnd, and has the simple conjugation of the verb which distinguishes all the Dravidian languages of the south. It has two dialects, those of Chinna Kōmedi, and of Bōd and Gumsar.

Kurukh

462 Further north, in the hills of Chota Nagpur, and in Sambalpur and Raigarh in the Central Provinces, amongst a number of Mundā languages, we find the Dravidian Kurukh or, as it is often called, Oraon. In the Central Provinces

Speakers of Kisān or Kōdā in the Central Provinces—	
Sambalpur	22,270
Feudatory States	19,801
TOTAL	42,071

it is usually called Kisān, the language of cultivators, or Kōdā, the language of diggers. The latter name should not be confused with the Mundā Kōrā. It also has no literature, and is unwritten, save for translations of the Gospels, and a few small books written by missionaries. We possess an excellent grammar of this language, which clearly proves its Dravidian character. Kurukh has no dialects proper, but a corrupt form, known as "Berga Oraon," is found in the Native State of Gangpur. The Kurukhs near the town of Ranchi have abandoned their own language, and speak a corrupt Mundārī called "Hōrōliā Jhagar."

Malhar

463. Malhar is a small Dravidian language spoken by 465 people in the Keonjhar State in Orissa. It was first discovered during the present Census, and except its undoubted Dravidian character, little is known about it. It seems to be a corrupt Kurukh.

Malto.

464 Finally, in this direction, we have the Malto, spoken by the Maler, or hillmen of Rajmahal. It is closely connected in its grammar with Kurukh, but has borrowed much of its vocabulary from the Aryan languages in its neighbourhood. It also appears to have borrowed to a small extent from the neighbouring Santālī. The Psalms, the four Gospels, and the Acts of the Apostles have been translated into it, but it possesses no indigenous literature or written character. We have a good grammar of it by one of the missionaries of the Church Missionary Society. Kurukh and Malto are sister-languages, and are related to

Kanarese. According to tradition their speakers are immigrants from the Carnatic and came to their present seats in comparatively recent times

465 Turning now to the western frontier of India, we come to the Brāhūī, ^{Brāhūī} spoken in the north of Sind and the east of Baluchistan. Ethnologically, the connection of the Brāhūīs with the inhabitants of Southern India has not yet been established. Of their ancient history little is known. They appear to have been driven from their ancient home on the lower Indus towards the inhospitable and inclement mountainous regions of Middle Baluchistan. They lead a pastoral life, living on the produce of their herds, and are generally inoffensive, sociable, and given to hospitality. Their distinguishing characteristics are an olive-coloured skin, a feeble, middle-sized frame, and a dark, thin, beard; and, notwithstanding the high altitude of their domicile and the cold climate in which they live, they have retained their dark complexion. That the language is connected with the Dravido-Mundā stock has long been known, and was finally proved by Dr. Trumpp in the year 1880. The best known authority on the subject is the account of the tribe and of their speech published by Dr. Duka in 1887, in which the results of Trumpp's investigations have been incorporated. The latter scholar was of opinion that the language is more closely connected with the Dravidian than with the Mundā family, more especially as it possesses no dual, which is a prominent characteristic of the last-named, and this has been fully confirmed by the Linguistic Survey. There are several grammars and vocabularies available, and a reading book, containing specimens of the language, was published at Karachi in 1877. No portion of the Bible seems to have been translated into it. The portion of Baluchistan inhabited by the Brāhūīs was not one of those in which vernacular languages were returned for the Census, and hence nearly all the speakers of Brāhūī shown in the tables hail from Sind. In their own home many do not speak their tribal language. The Brāhūīs frequently marry women of alien tribes, and in such cases the children speak their mother-tongue, rather than that of their fathers.

INDO-EUROPEAN FAMILY. THE ARYAN SUB-FAMILY.

466 The original home from which the populations, whom we now group ^{Original} together under the name of Indo-Europeans, spread over Europe and parts of ^{home} Western and Southern Asia, has been a subject of long discussion, extending over many years. We English are probably most familiar with the cautious opinion expressed by the late Professor Max Muller, that it was "somewhere in Asia," although his oft-repeated warning that the existence of a family of Indo-European languages does not necessarily postulate the existence of one Indo-European race, has too often been ignored by writers who should have known better. The earliest enquirers based their conclusions in the main on Philology and in former times it was, indeed, universally assumed that the original seat should be sought for either on the Caucasus or on the Hindū Kush. Since then other sciences have been made the handmaids of the enquiry. History, Anthropology, Geography, and Geology have all been pressed into the service. Philology fell for a time into discredit, and a more recent opinion, based in the main upon Anthropology, asserted with equal decision that the locality must be looked for in North-Western Europe. More recently, we have been led back to the old theory, and have had Armenia and the country round the Oxus and Jaxartes pointed out to us as the place of origin. The latest researches are those of Professor Otto Schrader, who, after a review of all the evidence available, considers that the oldest probable domicile of the Indo-Europeans is to be sought for on the common borderland of Asia and of Europe,—in the steppe-country of Southern Russia. Here they were a pastoral people, here some of their number gradually took to agricultural pursuits; and from here they wandered off to the east and to the west.

467. The first great division of the people was into the so-called *centum*-^{Centum and} speakers and *satem*-speakers. The former, who used some word cognate to the ^{satem speak-} Latin *centum* for the numeral "hundred," wandered westwards, and became the parents of the Greek, Latin, Keltic, and Teutonic races. The latter, with whom we are immediately concerned, and who expressed the idea of "hundred" by some word corresponding to the hypothetical form *satem*, wandered to the

east, and from their language descended the speech families which we call Aryan, Armenian, Phrygian, Thracian, Illyrio-Albanian, and Balto-Slavonic. We have to do only with the first of these six.

Meaning of
word
‘Aryan’

468. It is a matter for regret that this term “Aryan” is frequently used, and especially by the English, in an extended sense, as equivalent to “Indo-European.” It is really the name of one of the tribes of these *satem*-people, as used by these people themselves. In the following pages it will be used only in this sense, and it will not be applied to other *satem*-people, or to languages, such as English, Latin, or German, which are sometimes called “Aryan languages” in England.* The word “Aryan” is an Aryan word, originally used by the “Aryan” people, and among other suggested significations is said to mean “the befriended.” Indians and Eranians who are descended from an Indo-European stock have a perfect right to call themselves Aryans, but we English have not †

Aryan wan-
derers

469 At some time unknown to us these Aryans wandered forth eastwards from the original home of the Indo-Europeans, probably by a route north of the Caspian Sea. They settled in the country lying on the banks of the Jaxartes and the Oxus, and we may, with some probability, name the oasis of Khiva as one of the most ancient seats of the Aryans in Asia. Thence, still a united people, they appear to have followed the courses of these rivers into the high-lying country round Khokand and Badakhshan, where they separated, one portion marching south, over the Hindū Kush into the valley of the Kabul, and thence into the plains of India, and the other westwards towards what is now Merv and Eastern Persia. After the separation, the once common Aryan speech developed on two different lines and became, on the one hand, the parent of the Indo-Aryan, and on the other hand, that of the Eranian (or, as it is often called, “Iranian”) family of languages.† As in the case of the Western Indo-Europeans, wherever these two Aryan families wandered, they found themselves in the presence of aboriginal populations, who were

Indo-Aryans
and Eranians

Branch	Population returning it
Eranian	1,397,786
Indo-Aryan	219,780,650
TOTAL, Sub-family	221,178,436†

Race mixture
with Aborig-
ines

either driven by the invaders into the mountainous tracts of their own country, or else, and thus in the majority of cases, were conquered and compelled to adopt an Aryan speech. Nevertheless, as Professor Justi remarks, the ethnical character of the Aryans, who had immigrated in comparatively small numbers, became so altered, partly by intermixture with the numerically superior aborigines and partly owing to climatic influences, that, anthropologically speaking, they have developed into races alien to those of Europe, with whom they are connected by a relationship of language; just as, speaking generally, the inhabitants of Southern Europe have sprung from a stem which is not that of the Swedes or Frieslanders. Similarly, from the point of view of anthropology, the Hindūs are an altogether different race from the Teutons, whose language is, nevertheless, related to Sanskrit, and the Persians of the present day show a far closer resemblance to Orientals of other stocks than to the linguistically related fair complexioned sons of the sea-coasts of the north.

The Eranian Branch.

470 We have left the Eranian branch of the Aryans in the hill country near Khokand and Badakhshan. Thence they spread eastwards and westwards. Those

* No completely satisfactory name has yet been found to connote the whole family of speeches which I call above “Indo-European.” “Indo-Germanic,” “Indo-Teutonic,” “Indo-Keltic,” “Indo-Classic,” “Japhetic,” “Mediterranean,” and “Aryan” have all been suggested and some, especially “Indo-Germanic,” are used at the present day. Something may be said for and against each of these names. I have selected “Indo-European,” as to me the least objectionable. Some well known scholars maintain that the word “Aryan” was used in the original home of the Indo-Europeans, and that in Europe it has survived in Keltic languages in the Old Irish word *arri*, a prince. That may be, but I know of no reason for believing that the word was ever employed to signify the Indo-European people as a whole. It is a convenient word, and that is really all that can be said for its use in the extended sense of “Indo-European.”

† Strictly speaking, as we employ the term “Indo-Aryan,” we should also call the other linguistic family the Eranio-Aryan. It is, however, shorter to use “Eranian” without the addition of “Aryan,” and the use of the word will lead to no confusion. In the case of India it is different, for there are many Indian languages which are not Aryan. Hence, in order to connote the Aryan languages which developed in India, we must use the term “Indo-Aryan.”

‡ The Eranian figures include not only the total of Table X, Part II A, but also that of Part II B.

Group	Population returning it
Western (Persian)	20,748
Eastern	1,377,088
TOTAL, Eranian Branch	1,397,786*

who migrated to the east and are now found in the Pāmirs, still speak Eranian languages, but, further east, even in Yarkand, we find tribes of Aryan build and complexion who have adopted the Tartar speech of the nations who have conquered them in later periods. We may therefore take the Sargöl country as the eastern limit of the Eranian family of languages at the present day. To the west and south the Eranians occupied Merv, the whole of Persia,

Limits of
Eranian
Speech

Afghanistan, and Baluchistan. In the latter tracts, the eastern limit of Eranian speech may be considered to coincide roughly with the River Indus, although a good deal of the country west of that river was once occupied by Indo-Aryans, and Indo-Aryan languages are still found there. It does not appear, however, that the Eranians ever occupied the country now known as Kafiristan, or the Laghman country between Kafiristan and the Kabul River.

471. At the earliest period for which we have documentary evidence we find Eranian divided into two not very different languages, commonly called the Persian and Medic, though Persian and non-Persian would be better names †

472. The oldest form of the Persian language that we are acquainted with is the "Old Persian" of the Achæmenides, of which the best known example is found in one of the versions of the inscription of Darius I or Dārayavahush (B C 522-186) at Behistūn. It was the official language of the court of Persepolis, and as such was used over the whole of Erān, being employed not only in government documents, but also, inevitably, as a *lingua franca* between the inhabitants of different provinces, much as Hindōstānī is used in India at the present day. The next stage of this Persian language which we meet in a written form is the "Middle Persian" or Pahlavi (i.e., Parthian) of the Sassanides (third to seventh centuries A.D.), which bears much the same relationship to modern Persian that the Prakrit languages do to the modern Indo-Aryan vernaculars. Finally, we have modern Persian, which developed into a language of literature and polite society, and thus became fixed at an early period. Save for the admixture of Arabic words, it has been on the whole the same language for a thousand years. Under Muhammadan dominion it became one of the great vehicles of Indian literature, and some of the most famous Persian books, including the greatest lexicographical works, have been composed in India. It is nowhere a vernacular of that country, but is one of the languages of *belles lettres* amongst the educated Musalmāns. As stated by Mr. Baines in the last Census Report, "In Bengal and Rangoon there are remnants of the old ruling families of Delhi and Lucknow, in the Punjab, traders and immigrants are found, and the refugees from Afghanistan, and in Bombay, horse-dealers and emigrants from Persia who have settled down in the chief towns. Beyond these centres there is hardly any real Persian spoken, and a good deal of what is returned as such is but the better sort of Urdū." These, however, are not by any means the only people of Eranic origin who have made India their home, temporarily or otherwise. In the times of the Greek successors of Alexander the Great and of the Indo-Scythians who followed them, adherents of the old Eranian sun worship entered India as missionaries. Together with the elements of their religion, they were adopted into the ranks of the Brāhmins themselves, and still survive as Śākadvīpiya Brāhmins. In later times votaries of the rival and more orthodox cult of Zarathustra settled in Western India, in order to avoid Islamic persecution in their native land. They are now represented by the flourishing community of Parsees. In both cases, however, these immigrants have abandoned their Eranian vernacular and at the present day speak languages of India. The Persian of the Afghan refugees closely resembles the Badakhshī dialect of that form of speech, and contains a number of Pashtō words

473. The group of dialects which are classed together under the name of the "Medic" language was spoken in widely separated parts of Erān. Media itself

The Eranian figures include not only the total of Table X, Part II A, but also that of Part II B

† The characteristic features of the "Medic" language were, and are, found not only in Media, which corresponds to the modern North-Western Persia and Kurdistan, but also in tracts far to the east. They are, however, characteristic of the language of the Avesta, which is East Eranian in origin. The term Medic is, however, a convenient one as designating the tribe which was the most important politically amongst those who used the non-Persian language. At the same time it should be carefully noted that although the Avesta is written in "Medic," that is no ground for assuming that its birthplace was Media or anywhere in the neighbourhood. This view is, it is true, held by some scholars, but the question may not be begged by the wrong use of the word Medic.

Language	Population returning it
Baloch	152,188
Pashto	1,224,807
Örmuri	
Ishkashami	
Munjāni	28
Shighni	
Wakhi (Part II B)	15
TOTAL, Eastern group	1,377,038

was in what is at the present time Western Persia, yet the Medie word for “dog,” *σπάκα* which Herodotus has preserved to us, can claim the word *spae*, spoken nowadays in distant Afghanistan, amongst its descendants, but not the neighbouring Persian *sag*. In fact, the one literary monument of ancient Medio which we possess, the Avesta, had its home, according to most authorities, not in Media, but in East Erān. The oldest parts of the Avesta probably date from about the sixth century before our era, and although large portions of it belong to a period many centuries later, we have no documents to illustrate the mediæval Medio, as

East Eranian languages Pahlavi does for Persic. All that we have are the modern languages which have developed from it. These are the Ghalohah languages of the Pāmirs, Pashtō, Örmuri, Balōch, and a number of dialects (of which the best known is Kurdish) spoken all over Persia proper, and beyond. As the most important of these languages are spoken in the eastern portion of the ancient Erān, they are conveniently classed together under the name of the eastern group of the Eranian languages.* I shall commence to deal with them from the south.

Baloch 474 The home of the Balōch or Bilōch language is, as its name implies, Baluchistan, but it extends considerably beyond the usually recognised limits of that province. To the east it reaches to the Indus, as far north as Dera Ghazi Khan, although the country along the banks of that river is mainly inhabited by Indians whose language is either Lahndā or Sindhi. Northwards it extends to near Quetta, or, say, the thirtieth degree of north latitude, and, as we go westwards it is found even further than this, up to the valley of the Helmand. Westwards it extends to about the fifty-eighth degree of east longitude, and its southern boundary is the Arabian Sea. This large tract of country is inhabited also by another tribe, a non-Eranian one, the Brāhuis, who have a language of their own. Brāhui is spoken in the central portion of Baluchistan, and separates Baloch into two clearly distinguished dialects, viz., Northern Balōch and Southern and

M 609 Western Baloch or Makrāni. Each has minor sub-dialects, but the main division into Northern Balōch and Makranī is sufficient for our present purpose. Besides phonetical and grammatical differences, the former is much richer in words borrowed from India than the latter. As in Pashtō, both dialects freely borrow Arabic and Persian words. The Balōches, unlike their Afghān neighbours, have found difficulties in pronouncing certain of the Arabic letters, so that some of the words taken from that language have been quaintly transformed.

Baloch has but a small literature, most of which consists of folk songs, tales, and the like, that have been collected by Mr Dames and other scholars. We have grammars and vocabularies of both dialects, and several books of the Bible have been translated into it. For writing, both an adaptation of the Arab-Persian alphabet and the Roman character are employed. Of all the Eastern Eranian languages, Balōch is the one which has most conserved archaic forms. Its consonantal system in some respects stands on the same stage as that of the Mediæval Pahlavi. According to Professor Geiger, it still preserves unchanged letters which fifteen hundred years ago had begun to lose their pronunciation in the language which is now modern Persian. In its grammatical inflexions, also, several ancient forms are preserved. East of the Indus, Balōches, still using their native tongue, are found in some Native States as personal retainers and treasure-guards of the chiefs. These are usually Makranīs. But few of the speakers of Balōch have been recorded in the Census, most of them living outside the area of enumeration.

Pashto 475 Pashtō is spoken in British territory in the trans-Indus districts as far south as Dera Ismail Khan. Northwards it extends into the Yūsufzai country, Bajaur, Swat, and Buner, and through the Indus Kōhistān at least as far as the River Kandia, where the Indus turns to the south. In the northern portion of Swat, Buner, and the Kōhistān, many of the inhabitants speak in their homes

* This name “Eastern” must be taken with the same reservation as that with which “Medio” is employed. The minor dialects are spoken not only in Central Persia, but even in the far north-west, on the shores of the Caspian.

languages of Indo-Aryan origin, but Pashtō is universal as a kind of *lingua franca*. In British territory its eastern boundary may be roughly taken as coinciding with the course of the Indus, although there are Pashtō-speaking colonies in the Hazara district, and in Rawalpindi it is spoken on both banks of the river. After entering the district of Dera Ismail Khan the eastern boundary gradually slopes away from the Indus, leaving the lower parts of the valley in possession of Lahndā, and some thirty miles south of the town of Chaudhwān it meets Balōch, and turns to the west. The southern boundary passes south of Quetta and through Sherawak, till it is stopped by the desert of Baluchistan. Thence it follows the eastern and northern limits of the desert, with extensive colonies down the rivers which run south through the waste, to nearly the sixty-first degree of east longitude. It then turns northwards up to about fifty miles south of Herat, where it reaches its limit to the north-west. The northern boundary runs nearly due east up to the Hazara country, in which tract the inhabitants do not employ Pashtō but either Persian or a language of Mongolian origin. Skirting the west, south, and east of the Hazara country, and just avoiding the town of Ghazni, it finally goes northwards up to the Hindū Kush. Leaving Kafiristan to its east and north, it roughly follows the Kabul River up to Jalalabad, whence it runs up the Kunar so as to include Bajaur and Swat as already stated. In this irregularly shaped area the population is by no means entirely Pashtō-speaking. In British territory the Hindūs speak Lahndā, and in His Highness the Amīr's territory there is a great admixture of races, including Tājiks, Hazārās, Kizilbāshīs, and Kāfirs, who speak the languages of the countries of their origin. Roughly speaking, we may say that the country in which the majority of the population use Pashtō as their language is Southern and Eastern Afghanistan, the country to the west of the Indus from its southward bend to Dera Ismail Khan, and a strip of Northern Baluchistan.

If the identifications of the names are correct, Pashtō speakers have occupied at least a portion of their present seat for more than two thousand five hundred years. They have been compared with the *πάκτες* of Herodotus, and with the *Pakthas* of the Vēdas, while the *ἀπάυραι* of the Father of History are probably the same as the Afrīdīs, or as they call themselves, the Aprīdīs. Their subsequent history does not concern us here, and it will suffice to recall the fact that they have several times invaded India, that numbers are now settled in that country, where they are known as Pathāns (a corrupt form of "Pashtāna" or "Pakhtāna"), and that Shēr Shāh, the Emperor of Delhi, was of Afghān origin. Another class of Afghāns comes into India each autumn, and wanders over the country during the cold weather, usually as pedlars and horse-dealers, but sometimes for less reputable pursuits.

Pashtō has a literature of respectable size and possessing works of merit, which are written in a modification of the Arab-Persian alphabet. It has received considerable attention from scholars both in India and in Europe. The rugged character of its sounds suits the nature of its speakers and of the mountains which form their home, but they are most inharmonious to the somewhat fastidious oriental ear. Tradition tells us of the earliest linguistic survey on record, in which a Grand Wazir brought to his King specimens of all the languages spoken on the earth; but the specimen of Pashtō consisted of the rattling of a stone in a pot. According to a well-known proverb Arabic is science, Turki is accomplishment, Persian is sugar, Hindōstāni is salt, but Pashtō is the braying of an ass! In spite of these unfavourable remarks, though harsh sounding, it is a strong, virile language, which is capable of expressing any idea with neatness and accuracy. It is much less archaic in its general characteristics than Balōch, and has borrowed not only a good deal of its vocabulary, but even part of its grammar from Indian sources. As a whole, it is a singularly homogeneous form of speech, although two dialects are recognised, a North-Eastern or Pakhtō and a South-Western or Pashtō. They differ little except in pronunciation, of which the two names are good and typical examples of the respective ways of uttering the same word. Each has several tribal sub-dialects, which also differ only in points of pronunciation. Nothing like the total number of Pashtō speakers has been recorded in the census, which was necessarily confined to the settled British territory.

476. Pashtō exhibits many points of connection with the Ghalchah languages of the Pāmirs, but still more closely related to these last is the curious isolated

Ormuri.

little speech, known as Ōrmurī or Bārgista (the speech of Bārak), which is the tongue of a few thousand people near Kanigoram in Waziristan, a locality outside the census area. They have an impossible tradition that they came from Yaman in Arabia, and that their language was invented for them by a very old and learned man named 'Umar Labān,' some four hundred years ago. They claim to be descended from a certain Mir Bārak, from whom one of the names of their tribe and of their language is derived. There are a good many Ōrmurs settled in the Bahawalpur State, but they have all abandoned their own tongue. The language is certainly an East Eranian one, and deserves more study than it has yet received. It does not appear to have any literature, but the Arab-Persian alphabet as adapted for Pashtō has been employed for writing it.

Ghalchah languages.

477. The last of the East Eranian languages to be mentioned here are those which form the so-called Ghalchah group. They are all spoken in or near the Pāmirs, and are closely connected with each other. They are Wakhī, spoken in Wakhan; Shighnī or Khugnī in Shighnan and Roshan, with its dialect Sārīq-qōli, spoken in the Taghdumbash Pāmīr and Sārīqōl; Ishkashamī, Sanglichī or Zēbākī, spoken in the country round the towns whose name it bears; Munjānī or Munḡī of Munjan, with its dialect Yūdghā; and Yaghnōbī, spoken some way to the north of the Pāmirs round the head-waters of the Zarafshan River. Of these, the only one which concerns us immediately is Yūdghā or Lootkuhiwār, which has crossed the ridge of the Hindū Kush by the Dorah Pass, and is spoken in the "Ludkho" Valley leading from that pass to Chitral. The others are also heard in Chitral and its neighbourhood, but only in the mouths of visitors. None of them except Yūdghā seems to be vernacular in any territory immediately under British influence. Yūdghā itself is very little known. Colonel Biddulph has given us a short grammatical sketch and vocabulary, which has been the foundation of all subsequent writings, till the Linguistic Survey put further materials at the disposal of enquirers. That it is a dialect of Munjānī cannot be doubted. To the philologist, the Ghalchah languages are of importance. They possess some grammatical forms in common with certain of the Indo-Aryan languages immediately to their south, and thus appear to be one of the links connecting the latter with Eranian languages. The area in which Yūdghā is a vernacular is beyond the census area, and no speakers of it have been recorded. A few visitors who speak Munjānī and Wakhī appear in the tables. Their presence is, of course, accidental.

The Indo-Aryan Branch.

Indo-Aryan route into India.

478. As in the case of the Eranians, we have left the ancestors of the present Indo-Aryans in the hill country near Khokand and Badakhshan. Whilst the former wandered eastwards and westwards, the latter migrated towards the south. The reason for the parting of the ways is unknown to us. It may have been due to religious schisms, as some have urged; or to the establishment of a monarchical system amongst the Eranians to which the Indo-Aryans could not subscribe, as has been suggested by others; or it may have had no immediate visible cause, and have been due simply to that irresistible tendency to advance in a given direction which we often notice in the case of nomadic tribes. All that is certain is that they did separate, and that most of the Indo-Aryans went southwards by the western passes of the Hindū Kush and settled first in what is now Eastern Afghanistan, extending as far south as Harahvaitī, which corresponds to the Arachosia of Strabo, or the country round the modern Kandahar. Thence they advanced down the valley of the Kabul, and, as we all know, formed themselves into a nation in the Punjab. In the Punjab and in Eastern Afghanistan their language ultimately arrived at that stage which we may conveniently designate as Old Sanskrit. This was not a homogeneous tongue. It had dialects. All the modern Indo-Aryan languages of India proper can claim it, in some one or other of its dialects, as their parent. Classical Sanskrit is also a literary development of one of them.

Secondary route from the Pāmirs.

479. It is generally agreed that the great mass of the Indo-Aryans came south, as above stated, by the *western* passes of the Hindū Kush. It is also very probable that a smaller number of them entered from the head-waters of the Ōxus, by the much more difficult routes through Chitral or through Gilgit, or

through both. This theory is to some extent borne out by the present linguistic conditions of this tract of country. In the Pāmirs, where the Oxus takes its rise, the language is Eranian. To the south, in Kafiristan, Laghman, Chitral, and Gilgit, it is Indo-Aryan, but at the same time shows points of connection with the Ghalehah languages of the Pāmirs, which are not possessed by the speeches descended from Old Sanskrit or by Old Sanskrit itself. It can hence hardly represent a wave of reflex migration from the Punjab. How far south this minor Indo-Aryan invasion extended it is impossible to say. If we may take language as a test, it certainly got as far as Laghman to the east, and to the north of Swat and Buner, and traces of it are also found in Kashmir. In the last-named country it was met by a reflex wave from the south. Whether it actually penetrated into the Punjab itself is a question regarding which only guesses can be hazarded. On this point language offers us little assistance. It must be admitted that the theory here put forward, that there was a secondary Indo-Aryan migration from the Pāmirs, has not yet been thoroughly discussed by scholars, and that it is advanced here on purely linguistic grounds. To me personally these seem to be the only available explanation of the state of affairs, and from them it follows that, as the languages spoken in the country south of the Pāmirs have not come from the south, although Indo-Aryan, they are not derived from the Old Sanskrit which found its first home in Eastern Afghanistan and the Punjab, but have had an independent development from a distinct but cognate form of speech. This being

Non-Sanskritic Indo-Aryan languages

Main Group	Population returning it
Non-Sanskritic	54,425
Sanskritic	219,726,225
TOTAL, Indo-Aryan Branch	219,780,650

assumed, the Indo-Aryan languages fall into two main groups, the non-Sanskritic and the Sanskritic.

THE NON-SANSKRITIC INDO-ARYAN LANGUAGES.

480. As explained above, this group of languages is only provisionally called non-Sanskritic, on the ground that, although clearly Indo-Aryan, its speakers appear to have arrived at their present seats from the north, and not to be colonists from the south, where that form of Indo-Aryan language which we call Sanskrit became developed. These languages have one striking peculiarity in the conjugation of the verb, viz., that the characteristic letter of the infinitive mood is *k*. Thus "to beat" is in Veron Kāfir *pesumtīnik*, in Kalāshā Kāfir *tyek*, in Khōwār *dik*, in Shinā *shidōki*, and in Pashai *hanik*. The same

Characteris- tic points

Group	Population returning it
Shinā-Khōwār	54,425
Kāfir	
Kalāshā-Pashai	
TOTAL, Non-Sanskritic languages	54,425

letter occurs in the infinitive of the Eranian Ghalehah languages of the Pāmirs as in the Wakhi *chilgak*, to desire, but does not appear in any of the Sanskritic Indo-Aryan languages. There are other points of connection with the Ghalehah languages which it is not necessary to give here. It will suffice to compare the curious form *ispa* for "us," which occurs in Khōwār, with the Wakhi *spā*, our. These non-Sanskritic languages fall into three groups, the Shinā-Khōwār, the Kāfir, and the Kalāshā-Pashai. But few of the speakers

are recorded in the census, the area of which does not extend beyond the settled British frontier.

481. The Shinā-Khōwār group includes two languages, viz., Shinā and Khōwār. Shinā is the language of the Gilgit Valley, and of the Indus Valley from Baltistan to the River Tangir. It also extends to the south-east of the last-named river, and occupies a large block of mountain country between Baltistan and the Valley of Kashmir. It has several well-defined dialects, the most important being Gilgiti of the Gilgit Valley. To the north-west of Gilgit another unnamed dialect is spoken, and besides these we have Astōri of the Astor Valley, Chilāsī of the Indus Valley from near Astor to the Tangir, and Gurēzī of the Gurēz Valley. Besides

Shinā-Khōwār Group.— Shinā.

Language	Population returning it
Shinā	54,192
Khōwār	233
TOTAL, Shinā-Khōwār group	54,425

this there are the dialects of those whom the Bāltis call Brokpās, or Highlanders. These are the Brokpā of Dras, which differs little from Gurēzi, the Brokpā of Skardu which is the same as Astōri, and the curious isolated colony of Shinā, spoken near the frontier line between Baltistan and Ladakh, called the Brokpā of Dāh and Hanū. This dialect differs so widely from that of the other two Brokpās, that the respective speakers are unintelligible to each other, and have to use Bālti as a *lingua franca*. Shinā has been written about by several authorities, of whom the best known* are the late Dr. Leitner and Colonel Biddulph. The Dāh Hanū dialect has been described by Shaw. The Gurez people call themselves "Dards," and this name is by some extended to apply to Shinā generally, or even to all the non-Sanskritic Indo-Aryan languages.

Dard.

Khōwār.

482. Khōwār is the language of Chitral and of a part of Yasin. It is sometimes called Chatrārī, usually pronounced Ohitrālī by Europeans, or Arniyā. It extends down the Chitral River as far as Drosh and is bounded on the north by the Hindū Kush. No dialects have been recorded. Leitner, Biddulph, and O'Brien are our principal authorities for this language. The home of Khōwār lies outside the census area.

Kāfir Group

Bashgali

483. West of the Chitral country lies the mountainous tract known as Kafiristan, the land of the Unbeliever. There is no such language as Kāfirī, though it has often been written about.* The country is divided up into a number of tribal languages. Four of these, Bashgali, Wai, Veron, and Ashkun, are classed together in the Kāfir group. The Bashgal River takes its rise in the southern face of the Hindū Kush, and joins the Chitral River near Narsat. Its valley is the home of the Bashgali Kāfir language, which is the speech of the Siāh Pōsh Kāfirs generally. All the tribes who wear the dark-coloured raiment seem at once to understand each other, and to be able to converse fluently and without hesitation. We have a grammar of this interesting language from the pen of Colonel Davidson.

Wai.

484. The Sufēd Pōsh (white raiment) Kāfirs occupy the centre and south-east of Kafiristan, and consist of three tribes, the Wai, the Prēsun or Veron, and the Ashkund. The language spoken by the Wai is closely connected with Bashgali. It is spoken on the lower valley of the Waigal, a river which takes its rise in the interior of Kafiristan, and, after receiving the Wezgal (in whose valley Wasiñ Veri is spoken), enters the Kunar near Asmar. The Prēsuns inhabit an inaccessible valley in the heart of the country to the west of the Bashgal area. Their language is called Wasiñ Veri or Veron, and differs widely from Bashgali, its speakers being mutually unintelligible to each other. The remaining language, Ashkund, or the language of the 'Bare Mountain,' is spoken to the south-west of the tract inhabited by the Prēsuns. We know nothing about it except its name, its locality, and the fact that it is not understood by other Kāfirs. It is hence placed only provisionally in this group. All the speakers of this group inhabit countries outside the census area,—most of them, indeed, are subjects of His Highness the Amīr of Afghanistan.

Wasiñ Veri.

Ashkund.

Kalāshā-Pashai Group.
Kalāshā.

485. The Kalāshā-Pashai group includes Kalāshā, Gawar-bati, and Pashai. The Kalāshā Kāfirs inhabit the Dōāb between the Bashgal and Chitral Rivers. They are not "Kāfirs" in the strict sense of the word, as they have adopted the Musahnan religion, and are subject to the Ohitrālīs, although the Bashgalīs claim them as slaves. Previous to the Linguistic Survey, our only authority regarding this tribe was contained in the works of Dr. Leitner. Lower down the Chitral River, at its junction with the Bashgal, in and about the country of Narsat, dwell the Gawars, who also have a language of their own, known as Gawar-bati, or Gawar-speech, of which a vocabulary was given by Colonel Biddulph under the name of Narisati. Still lower down, on the right bank of the Chitral, which has now become the Kunar, dwell the Pashai. The only information which up to the present time has been available regarding their language has been based on short lists of words by Burnes and Leech. Pashai, properly speaking, is the speech of the Dēhgāns of Laghman and of the country to the east of it as far as the Kunar. It is also called Laghmāni, from the tract where it is spoken (the abode of the Lambagai of Ptolemy) and Dēhgāni because most of its speakers belong to the Dēhgān tribe. The boundaries

Gawar-bati.

Pashai.

Laghmani,
Dēhgāni.

* One ingenious gentleman has even given a specimen of it, but on examination it turns out to be the Amazula Kafir of South Africa!

of the language are said to be, roughly, on the west the Laghman River, on the north the boundary of the Kāfirs, on the east the Kunar River, and on the south the Kabul River, although the riverain villages on the left bank of the Kabul speak Pashtō. It has two well-marked dialects, an eastern and a western. This language, the most western outpost of Indo-Aryan speech, is thus spoken in the heart of Afghanistan, and is of more than ordinary interest both to ethnologists and philologists. It is fully dealt with in the Linguistic Survey. The languages of this group form a connecting link between the Kāfir and Chitral languages, and the Sanskritic languages of the Indus Kohistan and the northern Punjab. The further south they go, the more points of agreement with the Sanskritic languages are exhibited by them, though they tenaciously cling to their typical infinitive in *ṭ*. Pashai shows most Sanskritic influence, while the most northern, Kalāshā, on the other hand, has points in common with Khōwār which are wanting in the other members of the group. Gawar-bati occupies an intermediate position. All the speakers of this group inhabit countries outside the census area.

None of these languages are written or have any literature. The Roman alphabet has been used of late in transcribing them, though natives, when it is necessary to write any passage in them, more usually adopt the Arab-Persian alphabet as adapted to Pashtō. No portions of the Bible have as yet been translated into any of them.

THE SANSKRITIC INDO-ARYAN LANGUAGES.

486. Returning to the immigration of the Indo-Aryans through the Kabul Valley from the west, we are not to suppose that it all took place at once. Every probability leads us to imagine it as a gradual affair extending over many hundred years. We see traces of this in the Vēdas themselves. If professor Hillebrandt is right in his conclusion, the tribe over which King Divōdāsa ruled inhabited Arachosia (*i.e.*, Kandahar), while under his descendant Sudās its members are found on the Indus, and have already turned into legend the martial exploits of his ancestor. This is a thing for which generations are required. It will readily be understood, therefore, that at the earliest period of which we have any cognisance the Punjab was in the possession of a number of Indo-Aryan tribes, not necessarily on good terms with each other, and sometimes speaking different dialects. As each new tribe came from the west or, possibly, from the north, it pushed the older settlers before it.

487. The earliest documents which we possess to illustrate the language used by the Indo-Aryans of this period are contained in the Vēdas. The hymns which form this collection were composed at widely different times and in widely different localities, some in Arachosia and some in the country near the Jamna, but owing to their having undergone a process of editing by those who compiled them into their present arrangement, they now show few easily recognisable traces of dialectic differences. Attempts, it is true, have been made to discover such, but for our present purposes they are of small importance compared with the fact that dialects appear to be mentioned in the hymns as in actual existence.

488. While it is impossible to discriminate between each consecutive wave of these migrations, it is easy to distinguish between the earliest and the latest. More than twenty years ago Dr. Hoernle suggested that the evidence of the modern vernaculars of India justified the idea of there having been two Indo-Aryan invasions of India, one preceding the other, by tribes speaking different but closely connected languages. It is immaterial whether we are to look upon the state of affairs as two invasions, or as the earlier and later invasions of a series extending over a long period of time. The result is the same in both cases. The earlier comers spoke one dialect, and the new comers another. Dr. Hoernle, however, went further. He looked upon the second invaders as entering the Punjab like a wedge, into the heart of a country already occupied by the first immigrants, and forcing the latter outwards in three directions, to the east, to the south, and backwards to the west. His suggestion was founded on the facts which he had observed in his inquiries into the mutual relationships of the modern Indo-Aryan vernaculars, and it has been strongly confirmed by subsequent investigations, which have also tended to show that the speakers

of the language of the earlier immigration were driven to the north, as well as to the east, west, and south. In the Vēdas themselves we have records of wars between King Sudās, whose kingdom lay to the west, on the Indus and the Bharatas, against the Pūrus, an Aryan tribe which his poet called *mṛidhravāch*, i.e., speaking a barbaric tongue,* far to his east in the neighbourhood of the Ravi and the Jamna; and the contest between the rival priest-poets of the Sarasvatī and of the Indus forms one of the best known episodes of that collection. Similarly, the great war of the Mahābhārata, between the Kurus and the Panchālas, gives us hints of value. Since Lassen's time it has been recognised that the latter were older settlers than the former, and it is an interesting fact that some of their most important allies came from the neighbourhood of the Indus, and others from the Magadha in the distant east, while their chief helpers, the Pāndavas, were a mountain tribe, who practised polyandry and were on friendly terms with other clans which dwelt in the Himalayas. Nay, Lassen goes even further, and maintains that so long had the Panchālas preceded the Kurus that their complexion had been altered by the Indian climate, and that thus the war was really one between a dark and a fair-complexioned race. The Mahābhārata itself, which many scholars maintain was originally composed in the interests of the Kurus, calls tribes settled on the Indus, which were undoubtedly Aryan, by the opprobrious name of "Mlēcchha," thus denying to them even their common Aryanhood. Many other similar items could be taken from the same work did space permit.

Route of later
immigration.

489.* The question next arises as to the route by which this later Indo-Aryan invasion entered India. This it is impossible, with our present knowledge, to answer with any degree of certainty. We may but deal with probabilities. They can only have entered the Punjab from the west, the north, or the north-east. The north-west was barred by the difficult nature of the country (the modern Kafiristan), and no one will suggest that they came from the south or east. As regards the western route, they could hardly, if the theory is correct, have used that, for it was already barred by tribes of the earlier immigrants who occupied the Kabul and Indus Valleys. A glance at the map will show that the only probable route from the north-east was down the valley of the Jhelum, for the rivers more to the east take their rise in the inhospitable country south of Ladakh, and an immigration along any of their courses would imply that the tribes came through that country, even if they succeeded in surmounting the difficult passes which separate it from the northern Punjab. No one has suggested that Ladakh was ever inhabited by Aryans. This hill country between Ladakh and the plains of the Punjab is now filled with people who speak languages belonging to the group connected with the later invasion, so that we must assume that it was populated from the south. If they came down the Jhelum, they must have come through Kashmir, which is not likely, for, as will be subsequently shown, Kashmir and the Jhelum Valley are at the present day strongholds of speeches connected with the older invasion, forced northwards by the expansion of the new comers. There remains the route from the north. That means that the later comers entered the Punjab through the Gilgit and Chitral country, and thence through Swat and Bajaur. Now, it is just here that the barrier of languages connected with the earlier invasion is weakest. The hill country between the Kunar and the Indus, as far north as Drosh, is inhabited by a mixed population at the present day. Some of them are modern immigrants from Afghanistan and speak Pashtō, which has also been largely adopted by the original inhabitants. But some of these tribes still retain a language (Kōhistāni) which, while in the main belonging to the earlier invasion, also shows signs of contact with the later one. At the same time, in the same hills, there wander the Gūjars, whose language is one of the later stock. Immediately to their north and west are the languages which I have classed as non-Sanskritic. It is therefore probable (I do not go further than this) that the later invaders entered the Punjab through the Swat Kōhistān, and, if this is the case, they would be of the same tribe as the ancestors of those who now speak the non-Sanskritic languages, and would have represented the advance guard of these immigrants, who reached the Punjab which they found already settled by Indo-Aryans from the west speaking a closely cognate tongue. Thence they forced their way to the Eastern Punjab, which they wrested from

* So translated by Professor Hillebrandt. See Rīgveda, vii, 8, 18.

the first comers, who remained surrounding them on all sides. Their language became one of the various old dialects of the Punjab, from some or all of which in course of time developed ancient Sanskrit. It must, however, be freely admitted that the modern non-Sanskritic Indo-Aryan languages show few traces* of special connection with any particular group of the Sanskritic ones. They are no nearer to what we may for shortness call the later languages than they are to the earlier ones. This can be explained by the existence in later periods of Classical Sanskrit which for some thirty centuries has exercised a dominating influence over all the Indo-Aryan vernaculars of India proper.

490. It is reasonable to suppose that the tribes which composed this later invasion (wherever they came from) should have expanded as time went on, and should have thrust outwards in each direction the members of the earlier incomers. In mediæval Sanskrit geography we find one tract of country continually referred to as the true, pure, home of the Indo-Aryan people. The name given to it, *Madhyadēśa*, or "Middle-land," is noteworthy in this connection. It extended from the Himalaya on the north to the Vindhya Hills on the south, and from what is now Sirhind (properly 'Sahrind') on the west to the confluence of the Ganges and the Jamna on the east. According to legend, from end to end of this Middle-land, there ran, unseen to men, the holy stream of the Saraswati, on whose banks, in Vedic times, was the principal seat of the later invaders. Now, the modern Sanskritic Indo-Aryan vernaculars fall at once into two main families, one spoken in a compact tract of country almost exactly corresponding to this ancient *Madhyadēśa*, and the other surrounding it in three-quarters of a circle, commencing in Kashmir and running through the Western Punjab, Sind, the Marāthā country, Central India, Orissa, Bihar, Bengal, and Assam. Gujarat we know to have been conquered from Mathura (which was in *Madhyadēśa*), and this is the only part of India in which we find at the present day that the inner family has burst through the retaining wall of the outer one.

491. Between these two families of languages there is a remarkable series of antithetic facts. In pronunciation they are sharply opposed; each has preferences which will at once occur to every philologist. The most remarkable difference is in the treatment of the sibilants, which has existed since the time of Herodotus. The inner family hardens them; every sibilant is pronounced as a hard dental *s*. The outer languages (like those of the Eranian branch) seem, almost without exception, to be unable to pronounce an *s* clearly. In Persia the Greeks found an *s* pronounced as *h* or even dropped altogether. The representation of the River Sindhu by "Indus" is a familiar example. So, in Sindhī, the familiar *kōs* becomes *kōhu*. In the east the old Prakrit grammarians found *s* softened to *sh*. At the present day we find the same shibboleth of nationality; in Bengal and part of the Marāthā country *s* is weakened to *sh*, and in Eastern Bengal and Assam it is softened till its pronunciation approaches that of a German *ch*. On the other hand, on the North-Western Frontier and in Kashmir, it has become an *h*, pure and simple.

492. In the declension of nouns there are also differences. The inner family is, in the main, a set of languages which are in the analytic stage. The original inflections have mostly disappeared, and grammatical needs are supplied by the addition of auxiliary words which have not yet become parts of the main words to which they are attached. Familiar examples are the case suffixes, *kā*, *kō*, *sē*, etc., of Hindi. The languages of the outer family have gone a stage further in linguistic evolution. They were once, in their old Sanskrit form, synthetic; then they passed through an analytic stage—some are only passing out of that stage now, and are, like Sindhī and Kāshmīrī, so to speak, caught in the act,—and have again become synthetic by the incorporation of the auxiliary words, used in the analytic stage, with the main words to which they are attached. The Bengali termination of the genitive, *ēr*, is a good example.

493. The conjugation of the verb offers very similar peculiarities. Here, however, it is necessary to go into greater detail. Broadly speaking, two tenses and three participles of Old Sanskrit have survived to modern times. These are the present and the future tenses and the present active and past and future passive participles. The Old Sanskrit past tense has disappeared altogether. The old present tense has survived in every modern language, and, allowing for

* See, however, the remarks on Lahnda, *post*.

phonetic growth, is the same in form everywhere, although its meaning has frequently changed; for instance, in Kāshmiri it has become a future indicative and in Hindī a present subjunctive. The old future has survived, but only here and there, and principally in Western India. Most of the modern languages use instead a periphrasis based on the old Sanskrit future participle passive, and when they wish to say "I shall strike," their speakers really say, without knowing it, "it is to be struck by me." The original past tense has universally disappeared, and all the modern languages employ in its place a similar periphrastic form based on the old past participle passive. Instead of saying "I struck him," they all, without exception, say "he (was) struck by me." Here it is that we see the great contrast in the treatment of the verb between the inner and the outer families. It will be noticed that in the tenses formed from passive participles, the subject of the verb, "I," has been put into the ablative, or, as it is in these circumstances called, the agent case. "I" has become "by me." Now in Old Sanskrit "by me" could be represented in two ways.* We could either say *mayā*, which was a separate distinct word, or we could employ the syllable *mē*, which could not stand by itself, but could only be attached enclitically to a preceding word. In just the same way there was a two-fold series of enclitic and non-enclitic forms for the other personal pronouns, and for all in both numbers. These enclitic pronouns are familiar to Europeans. In Latin, "give to me" was "date mihi," in Italian it is "datemi," in which the *mi* is an enclitic pronoun. Similarly we have an enclitic pronoun when Mr. Punch makes a tipsy man say "gimme" for "give me." Now the modern Indo-Aryan languages show most clearly that the Outer family is derived from a dialect or dialects of Old Sanskrit which freely used these enclitic pronouns with passive participles, while the Inner family is descended from a dialect or dialects which did not use them at all in such cases. The result is that in the Inner family the bare participles are used for every person without change of form,—*mārā* means alike "I struck," "thou struckest," "he struck," "we struck," "you struck," and "they struck,"—while in the Outer family, the enclitic pronouns have become permanently fixed to the root, and have developed into personal terminations like what we have in Latin or Greek. In these languages "I struck," "thou struckest," "he struck," and so on, are all different words, each of which tells by its termination who the striker was. This important distinction is at the bottom of the altogether different appearances which the two families present. The grammar of each of the Inner ones can be written on a few leaves, while, in order to acquire an acquaintance with one of the Outer, page after page of more or less complicated declensions and conjugations must be mastered.

Limits of
Inner family.

494. The limits of these two families may be defined as follows:—The Inner family is bounded on the north by the Himalayas, on the west by, roughly speaking, the Jhelum, and on the east by the degree of longitude which passes through Benares. The western and eastern boundaries are very wide, and include a good deal of debateable ground in which the two families meet and overlap. If these limits are narrowed so as to include only the purer languages of the Inner family, the western boundary must be placed at about the meridian of Sirhind in Patiala, and the eastern at about the meridian of Allahabad in the United Provinces. Between Sirhind and the Jhelum the language is Panjābī, which contains many unrecorded forms, increasing as we go westwards, for which the only explanation is that to the west of Sirhind, or, we may say, to the west of the Sarasvatī, the country was originally inhabited by tribes belonging to the Outer family, who were conquered and absorbed by members of the Inner one, whose language gradually superseded theirs, just as Hindōstānī is now gradually superseding Panjābī. Panjābī is one of the Inner languages, but it contains many forms which can only have survived (if they were not imported) from an original Outer dialect. Between Allahabad and Benares, or, in other words, in Oudh, Baghelkhand, and the Chhattisgarh country, the language is Eastern Hindī, which is an intermediate form of speech, possessing the characteristics of both families. To the south, the boundary of the Inner family is well defined and may be roughly taken as corresponding to the southern

* Sanskrit scholars will recognise that this is not literally true, as according to the grammarians, the enclitic *mē* belonged to the dative and genitive, not to the instrumental. They will also recognise that owing to the interchange of case forms which arose at an early stage in the linguistic history of India, the point is of no importance. Compare Pischel in ZDMG XXXV (1881), p. 714.

watershed of the Nerbudda River. On the west, the family merges into the Outer Sindh through Rajasthan, and into Lahnda (also Outer) through Panjāb. As stated above, it has burst through the retaining wall of exterior languages and reached the sea in Gujarat. The remaining Sanskritic Indo-Aryan languages belong to the Outer family.

495. Taking the Sanskritic Indo-Aryan languages as a whole, they fall into the following groups:—A North-Western, a Southern, and Eastern (belonging to the Outer family); a Mediate (intermediate between the two families), and a Western and a Northern (belonging to the Inner family). We thus arrive at the following list of languages:—

		Population returning it
A.—Outer—		
I North-Western Group—		7,352,305
1 Kāshmīrī	1,007,957	
2. Kōhstānī	36	
3. Lahndā	3,337,917	
4. Sindhī	3,006,395	
II Southern Group—		18,237,899
5 Marāthī	18,237,899	
III Eastern Group—		90,242,167*
6 Oīyā	9,687,429	
7. Bihārī	31,579,844*	
8 Bengālī	41,621,018	
9 Assamēse	1,350,846	
B.—Intermediate—		
IV Mediate Group—		22,136,353*
10 Eastern Hīndī	22,136,353*	
C.—Inner—		
V Western Group—		78,632,099*
11 Western Hīndī	10,714,925*	
12 Rajasthanī	10,917,712	
13 Gujjaratī	9,928,501†	
14 Panjābī	17,070,961	
VI Northern Group—		3,124,681
15 Western Pahārī	1,710,029	
16 Central Pahārī	1,270,931	
17. Eastern Pahārī	113,721	
TOTAL		219,725,509

Of the above, Marāthī and Eastern Hīndī are groups of dialects, not of languages. The languages of the Northern group are merely, each of them, also a group of dialects. Western Pahārī means the dialects spoken in the hills north of the Punjab, such as Chambiālī, Kuluhī, and Sirmaurī. They are many in number. Central Pahārī includes the hill dialects spoken round Nainī Tal and Mussōrie. They are Garhwālī, Jaunsārī, and Kumaunī. Eastern Pahārī is what is more commonly called Naipālī. The names are those used at the last census †. By adding to the above 716 persons who have returned themselves as speaking Sanskrit, we arrive at 219,726,225 as the total number of speakers of the Sanskritic sub-branch of the Indo-Aryan vernaculars.

496. As stated above, the earliest specimens of the actual Aryan vernaculars of India are to be found in the hymns of the Rig Vēda. Most of these hymns were undoubtedly originally composed in the actual spoken language of their authors, a natural, unartificial language, as compared with the more artificial language subsequently developed in Brahmanical schools and called Classical Sanskrit. Although they have been edited, so as to obscure dialectic peculiarities, by the Brāhmins who compiled them into one collection, these hymns furnish invaluable evidence as to what was the house-language of the earliest Aryan inhabitants of India.

497. From the inscriptions of Asōka (circ. 250 B.C.) and from the writings of the grammarian Patañjali (circ. 150 B.C.), we learn that by the third century before our era an Aryan speech (in several dialects) was employed in the north

* These figures do not agree with those given in the tables. For explanations of the discrepancies, see the separate languages.

† These figures include the Bhil dialects and Khāndōsi.

‡ Much of the above is taken from Dr Hoernle's Annual Address made to the Asiatic Society of Bengal in the year 1898. The portion of that address regarding the languages of India was based on notes furnished by me (as Dr. Hoernle himself states), and hence I have had no hesitation in quoting him without the use of inverted commas.

Primary Prakrit	of India, which had gradually developed from the ancient vernaculars spoken during the period in which the Vedic hymns were composed, and which was the ordinary language of mutual intercourse. Parallel with it, the so-called Classical Sanskrit had developed under the influence of the Brāhmins from one of these dialects as a secondary language, and achieved a position much the same as that of the Latin of the Middle Ages. For centuries the Aryan vernacular language of India has been called Prakrit, <i>prākṛita</i> , i.e., the natural, unartificial, language, as opposed to Sanskrit, <i>sanskṛita</i> , the polished, artificial, language. From this definition of the term "Prakrit," it follows that the vernacular dialects of the period of the Vedic hymns, as compared with the comparatively artificial <i>sanskṛita</i> language of these hymns as they have been preserved by the Brāhmins who compiled them, were essentially Prakrits, and as such they may be called the <i>Primary Prakrit</i> of India. The vernaculars which developed from them and which continued developing, alongside of the Sanskrit whose growth was arrested by the grammarians of the Brahmanical schools, until they became the modern Sanskritic Indo-Aryan vernaculars, may be called the <i>Secondary Prakrits</i> ; while the final development, these modern vernaculars themselves, as they have existed for the past nine hundred years, may be called <i>Tertiary Prakrits</i> . It is with these Tertiary Prakrits that we are immediately concerned.
Secondary Prakrits Tertiary Prakrits	498 It stands to reason that no distinct border line can be drawn between the Primary Prakrit (or Prakrits)* and the Secondary Prakrits, or between the Secondary Prakrits and the Tertiary. We have no positive information regarding the earliest condition of the Secondary Prakrits. They appear to us first in their vigorous youth in the Asōka inscriptions. We know, on the other hand, that the change from the Secondary Prakrits to the Tertiary ones was, as might be expected, so gradual that, at or about the approximate border line, it is impossible to state whether the language belongs to the Secondary or Tertiary stage. At the same time there is no difficulty in recognising the main distinctive peculiarities of each group. In the primary stage the language is synthetic and has no objection to harsh combinations of consonants. In the secondary stage the language is still synthetic, but diphthongs and harsh combinations of consonants are eschewed, so much so that, in its latest artificial literary developments, it arrives at a condition of almost absolute fluidity, becoming a mere collection of vowels hanging for support on an occasional consonant. This weakness brought its own Nemesis, and in the Tertiary stage we find the hiatus of contiguous vowels abolished by the creation of new diphthongs, declensional and conjugational terminations, consisting merely of vowels, worn away, and a new kind of language appearing, no longer synthetic, but analytic, and again reverting to combinations of consonants under new forms, which three thousand years ago had existed, but which two thousand years of attrition had worn away. Nay more, in some of the modern vernaculars, mainly those which I have called the "Outer" ones, we see the analytic form of language again disappearing, and being replaced by a new synthetic form of language, similar in its course of development to that of the Indo-European <i>Ursprache</i> of the pastoral tribes on the shore of the Caspian.
Border line between each stage	499 As to whether the very earliest form of the Secondary Prakrit language had any dialects we are not in a position to say positively, but, as we know that there were dialects in the Vedic times, there is every reason to believe that it possessed them too. It covered a wide extent of country, from the Indus to the Kosi, and it would be surprising if there were no local variations of speech. Moreover, two hundred and fifty years before Christ, we find the edicts of Asōka written in this language, and here we see that the then existing Aryan vernacular of India did contain at least two main dialects, a Western and an Eastern Prakrit. The particular stage of their development at which the Secondary Prakrit had by this time arrived, was crystallised by the influence of Buddhism, which used it for its sacred books. It is now known as the Pali language. As a vernacular it, however, continued its course of development, and, in later stages, in various dialects, is known as the Prakrit <i>par excellence</i> . When we talk of Prakrits, we usually mean this later stage of the Secondary Prakrits, when they had developed beyond the stage of Pali, and before they had arrived at the analytic stage of the modern Indo-Aryan vernaculars.
Characteris- tics of Primary Prakrit	
Characteris- tics of Secondary Prakrit	
Characteris- tics of Tertiary Prakrit	
Dialects of Secondary Prakrit	
Pali stage	
Stage of Prakrit <i>par excellence</i>	
Prakrit in literature	These Prakrits became, in later times and under the influence of religious

* It is quite certain that, even during the Vedic period, the vernaculars in actual use already contained many words in the same stage of development as Pali, which is a Secondary Prakrit.

and political causes, the subject of literary study. Poems and religious works were written in them, and they were freely used in the drama. We have grammars of them written by contemporaries or by men who lived only a short time after they had become dead languages. It may be taken as a convenient date for fixing the memory, that these Prakrits were dead languages by, in round numbers, 1000 A.D. All that we know about them is founded on the literature in which they have survived, and in the grammars written to illustrate that literature. Unfortunately we cannot accept this literature as illustrating the actual vernaculars on which it was founded. To adapt them to literary purposes the writers altered them in important particulars, omitting what they considered vulgar, reducing wild luxuriance to classical uniformity, and thus creating altogether artificial products suited for that artificial literature which has ever been so popular in India. These literary Prakrits cannot, therefore, be considered as representing the actual speech of the people at any epoch, although they are based upon it, and a veil is drawn by them between us and it which it is not always easy to lift. We are able, however, to distinguish (as in the Asoka Inscriptions) that there was a Western Prakrit and an Eastern Prakrit, each possessing distinctly marked characteristics. The principal form of the Western was called *Saurasēnī*, the language of Śurasēna or the middle Gangetic Doāb and its neighbourhood, and of the Eastern, *Māgadhi* or the language of Magadha, the present South Bihar. Between these two, there was a kind of neutral ground, the language of which was called *Ardha-Māgadhi*, or Half-Māgadhi, which partook of the nature of both languages. Its western boundary was somewhere near the present Allahabad, but we cannot say certainly how far east it extended. According to tradition, it was the language in which Mahāvīra, the Jain apostle, preached (he belonged to this side of India), and it was used in the older Jain scriptures. Closely connected with it, but leaning rather to the Eastern than to the Western, was the *Māhārāṣṭrī*, or language of Mahārāṣṭra, *i.e.*, the Berars, and the country adjoining. It became the main language of Prakrit poetry. On the other hand, in the extreme north-west of India, bordering on the Iranian tongues of what are now Afghanistan and Baluchistan, there must have been an unnamed speech, whose existence is vouched for by the next stage of the Prakrits to be presently described, and which was a development of the particular dialect of Old Sanskrit spoken on the banks of the Indus.

Western
Prakrit
Eastern
Prakrit

500. The next stage of the Secondary Prakrits is that known as "literary Apabhramśa." The word *Apabhramśa* means "corrupt" or "decayed." Applied to a language, it means, from the point of view of a philologist, "developed." When the Prakrits, by being reduced to writing, became fixed exactly as Sanskrit had become fixed in the Brahmanical schools, and remained unchanged as a literary form of speech for many generations, the true vernaculars on which they were founded were called by this name, as they were from the point of view of a scholar of Prakrit "corrupt." These were the Apabhramśas, and in a still further stage of their development (by which time the Prakrits had become dead languages) they also were used in literary works, some of which have survived to the present day. As these works were evidently intended to represent the current vernacular as nearly as possible, the language used has not been nearly so severely edited as was the case with the earlier Apabhramśas which were the foundation of the Prakrits. We have, therefore, in this Apabhramśa literature valuable evidence as to the actual spoken languages of India at the time of its committal to writing. As to what that time was we are unable to say with any degree of exactitude. All that we can be certain about is that we have Apabhramśa poetry written in the sixth and also in the first half of the eleventh century, although at the latter period it may have been a dead language. On the other hand, the earliest specimens which we possess of what may be called the modern vernaculars (*i.e.*, the Tertiary Prakrits) date from the end of the twelfth and the beginning of the thirteenth centuries. It is quite possible that there were older ones. At any rate, the form of language which I call Tertiary must have been well established before it could have been used for literary works, so that, as I have said above, we may roughly consider the year 1000 A.D. to be the approximate date from which the modern Indo-Aryan languages took their present shape. We may thus assume that the vernaculars of India were represented by the literary Apabhramśa dialects in, approximately, the later centuries of the first millennium after Christ.

Apabhrar

Apabhramśa
dialects

501. It is, therefore, to Apabhramśa rather than to the literary Prakrits, and much more rather than to Sanskrit, that we must look for explanations of the development of the modern vernaculars. Sanskrit and, specially, the literary Prakrits will often, it is true, throw valuable side-lights on our enquiries, but the root of our investigations must be Apabhramśa. Only one dialect,* the Nāgara (probably spoken in Western India), has been preserved to us by literature, but with the aid of the Prakrit grammarians it is not difficult to reconstruct the chief features of the others. It will be sufficient to give a list of these dialects together with the modern languages which have descended from them. In the country round the lower Indus the Apabhramśa dialect called Vṛāchada was spoken. It was the parent of the modern Sindhī and Lahndā, the latter being spoken in the ancient country of the Kaikēyas, who appear to have had a dialect of their own, or possibly, to have included in their number members of a tribe speaking a non-Sanskritic language. We do not know the name of the dialect from which Kōhistānī and Kāshmirī are descended, but it must have been closely related to Vṛāchada, if not actually that form of speech. South of the Nerbuddā Valley, running nearly across India from the Arabian Sea to Orissa, there must have been spoken a number of dialects all related to the Apabhramśa Vaidarbhī or Dākshinatya, whose head-quarters were Vidarbha, the modern Berar, known in Sanskrit literature as the Great Kingdom—Mahārāshtra. It and allied Apabhramśas were the parent of the modern Mārathī† To the east of Dākshinatya, and reaching to the Bay of Bengal, was the Apabhramśa Ōdrī or Utkalī, from which was descended the modern Oriyā. North of Ōdrī, and covering the greater part of the present provinces of Chota Nagpur and Bihar, together with the eastern half of the United Provinces up to about the meridian of Benares, was the great Apabhramśa dialect of Māgadhi, the parent of the modern Bihārī, one of whose dialects, Magahī, still bears the ancient name. It was the principal dialect which corresponded to the old Eastern Prakrit, and not only Ōdrī, already mentioned, but also Gaudī and Dhakkī are further developments of it. These four are all representatives of the old Eastern form of speech. East of Māgadhi lay Gauda or Prāchya Apabhramśa, the head-quarters of which were at Gaur, in the present district of Malda. It spread to the south and south-east, and here became the parent of the modern Bengali. Further east, round the present Dacca, it developed into another Apabhramśa, Dhakkī, the original of the modern Eastern Bengali spoken in Mymensingh, Dacca, Sylhet, and Cachar. Besides spreading to the southwards, Gauda Apabhramśa also spread to the east keeping north of the Ganges, and is there represented at the present day by Northern Bengali and, in the valley of Assam, by Assamese. Northern Bengal and Assam did not get their language from Bengal proper, but directly from the west. Māgadhi Apabhramśa, in fact, may be considered as spreading out eastwards and southwards in three directions. To the north it developed into Northern Bengali and Assamese, to the south into Oriyā, and between the two into Bengali. Each of these three descendants is equally directly connected with their common immediate parent, and hence we find Northern Bengali agreeing in many respects rather with the Oriyā spoken far away to the south than with the Bengali of Bengal proper, of which it is usually classed as a subordinate dialect.

502. We have now concluded our survey of the Apabhramśa dialects, which belong to what I have called the Outer Indo-Aryan languages. Between the eastern and the western Prakrits there was, as already stated, an intermediate one called Ardha-Māgadhi. Its modern representative is Eastern Hindī, spoken in Oudh, Baghelkhand, and the Chhattisgarh country. The eastern limit of Eastern Hindī may roughly be taken as the meridian of Benares, and, to the west, it passes a short way beyond Allahabad, its furthest point being in the district of Banda.

* A striking proof of the existence of dialects in Vedic times is conveyed by the fact that Apabhramśa, and indeed all the Secondary Prakrits, contain forms which cannot be explained by any reference to Classical Sanskrit. Such is the locative termination *hi* derived immediately from the Pāli and Old Sanskrit (but not the literary Sanskrit) *dhi*. This corresponds to the Greek termination *θι*, and must (as *dhi*) have been used in the Vedic period though excluded from the standard dialect from which Classical Sanskrit is derived.

† Mañṛthi was derived from the Apabhramśa spoken in Mahārāshtra. What is known as Mahārāshṭrī Prakrit was the literary form of that Apabhramśa, a very artificial production, which was principally used for poetry intended to be set to music, and which has freely borrowed from Prakrits spoken in other parts of India.

503. As regards the Inner languages, the principal Apabhramśa is that which has been preserved to us by literature. It was known as Nāgara Apabhramśa, and, as its name suggests, was probably the language of Western India, where the Nāgara Brāhmins still form an important part of the community. In various dialects (and it certainly had local variations) it must, if we are to accept the evidence of the modern vernaculars, have extended over the whole of Western India north of the Deccan, excepting the extreme north-west. Amongst them was the Śaurasēna Apabhramśa of the middle Dōāb,* which was the parent of the modern Western Hindī and Panjābī. Another dialect of this Apabhramśa, Āvantī, whose head-quarters were in the country round the modern Ujjain, was the parent of Rājasthānī and yet another, Gaurjarī, of the modern Gujarātī. Both these last were certainly very closely related to the standard Nāgara Apabhramśa dialect.

504. There remain the modern languages of the Northern Group. These are spoken in the Himalaya from the Eastern Punjab to Nepal. We know of no Prakrits or Apabhramśas peculiar to this tract. The modern languages are closely connected with Rājasthānī, and we know from history that at least some of the tribes which speak them claim to have originally migrated from Rājputana. It is therefore safe to assume, until further information becomes available, that all these forms of speech should linguistically be classed as of common origin with Rājasthānī, and that therefore they are derived from the Apabhramśa of Āvantī.

505. Concurrent with this long development of the modern vernaculars, we have the Classical Sanskrit, also derived from one of the Primary Prakrit dialects, but fixed in its existing form by the labours of grammarians, which may be said to have culminated in the work of Pāṇini, say, about the year 300 B.C. This sacred language, jealously preserved by the Brahmins in their schools, had all the prestige which religion and learning could give it. It borrowed freely from the secondary Prakrits, and they in turn borrowed freely from it. On the other hand the Prakrit grammarians, who dealt only with Prakrit forms, ignored these Sanskrit ones, and the literary works written in artificial Prakrit which have come down to us rigorously excluded them. We have, however, the express statement of grammarians, and we must also conclude from analogy, that this borrowing did exist, and that, as at the present day, the more highly educated Prakrit-speaking population freely interlarded their conversation with Sanskrit words. These words, once borrowed, suffered a fate similar to that of the ancient Primary Prakrit words which came down to them by direct descent. They became distorted in the mouths of the speakers, and finally became Prakrit in form, though not by right of origin.

506. These borrowed words were called *Tatsamas* or "The same as 'that' (i.e., Sanskrit)," while the original Prakrit words, which had come by direct descent from the Primary Prakrit were called *Tadbhavas* or "Having 'that' (i.e., Sanskrit, or more correctly the Primary Prakrit, from one of the dialects of which Classical Sanskrit was descended) for its origin." To these may be added a third class, the *Tatsamas* which had become distorted in the mouths of the Prakrit-speaking population, but which were still unmistakably borrowed words. These are usually known to European scholars as semi-*Tatsamas*. It is evident that, in the natural course of events, the tendency must have been for all *Tatsamas* to become semi-*Tatsamas*, and for the latter to be ultimately so degraded as to be indistinguishable from *Tadbhavas*. Another class of words is also to be mentioned, the so-called "Dēśya" words of the Indian grammarians. It included all words which the grammarians were unable to refer to Sanskrit as their origin. Many such words were included in this group simply through the ignorance of the writers who catalogued them. Modern scholars can refer

* It is not quite certain that the Śaurasēnī Prakrit (distinguished from the Śaurasēna Apabhramśa), as it has been preserved for us in literature, really represents a language founded on an early vernacular of the Dōāb. It may be an artificial literary production founded on the general linguistic peculiarities of a much wider area of Western India than this comparatively small tract. One thing is certain, that the literary Śaurasēnī had peculiarities (e.g., the form of the future tense) which do not, at the present day, appear in the language of the Gangetic Dōāb, but which do appear in Gujarātī. There are, however, explanations of this fact which it is not necessary to give here. On the other hand, Śaurasēnī Prakrit more nearly approaches Sanskrit in its vocabulary than any of the other Prakrits. It has fewer of those so-called "Dēśya" words which are to be explained as descended from dialects of Old Sanskrit, different from that dialect on which Classical Sanskrit is mainly based. This is entirely consonant with the fact that, according to tradition, that dialect was the one which, in Vedic times, and later, was spoken on the banks of the Sarasvatī, and in the Upper and Middle Dōāb. Even the Greeks recognised Mūtra (Mathurā), the chief town of the country of Śaurasēna, as Μόδουρα ἡ τῶν θεῶν.

most of these to Sanskrit like any other Tadbhava. A few others are words borrowed from Dravido-Mundā languages. The great majority are, however, words derived from dialects of Old Sanskrit which were not that from which Classical Sanskrit has descended. They are thus true Tadbhavas, although not in the sense given to that word by Indian grammarians, in whose philosophy the existence of such ancient dialects was not dreamed of. These Dēśya words were local dialectic forms, and, as might be expected, are found most commonly in literary works whose origin was in countries like Gujarat, far away from the natural home of Classical Sanskrit, the *Madhya-dēśa*. For our purpose they may be considered as identical with Tadbhavas.

Tatsamas and
Tadbhavas in
the modern
vernaculars.

507. We find an exactly similar state of affairs in the modern Sanskritic Indo-Aryan vernaculars. Omitting foreign words (such as those borrowed from Dravido-Mundā languages, from Arabic, Persian, or English), their vocabularies may each be divided into three classes, Tatsamas, semi-Tatsamas, and Tadbhavas. The last class consists of words which the modern vernaculars have received by descent from the Primary Prakrits, or from Classical Sanskrit through the Secondary Prakrits. From the point of view of the present day, their ultimate origin is immaterial. In the stage of the Secondary Prakrits, they may have been Tadbhavas or Tatsamas, but the fact that they have come down to us through that stage is sufficient to make them all Tadbhavas in the stage of the Tertiary Prakrits. On the other hand, the Tatsamas and semi-Tatsamas of the present day are loan-words, borrowed in modern times by the modern vernaculars (not by their Secondary Prakrit progenitors) from Sanskrit. To take examples, the modern vernacular word *ājñā*, "a command," is a Tatsama loan-word borrowed direct from Classical Sanskrit. Its semi-Tatsama form, which we meet in some languages, is *āgyā*, and one of its Tadbhava forms is the Hindī *ān*, derived from the Secondary Prakrit *ānā*. So also, *rājā*, a king, is a Tatsama, but *rāy* & *rāo* is a Tadbhava. Of course complete triplets or pairs of every word are not in use. Frequently only a Tatsama or a Tadbhava occurs by itself. Sometimes we even find the Tatsama and the Tadbhava forms of a word both in use, but each with a different meaning. Thus, there is a Classical Sanskrit word *vaṁśa*, which means both "family" and "bamboo," and connected with it we find in Hindī the semi-Tatsama *bans*, meaning "family," and the Tadbhava *bāñs*, meaning "a bamboo."*

Influence of
Sanskrit on
the modern
vernaculars

508. We thus see that for many hundred years Classical Sanskrit has been exercising, and is still exercising, a potent influence on the vocabularies of the modern vernaculars. It is only upon the vocabularies that its influence has been directly felt. Their grammars show little if any traces of it. These have continued steadily in the courses of their development since the Vedic times. The influence of Sanskrit may have retarded this development, and probably did so in some cases, but it never stopped it, and not one single Sanskrit grammatical form has been added to the living grammars of these languages in the way that Sanskrit words have been added to their vocabularies. Nay, more, all these borrowed Tatsamas are treated by the vernaculars exactly as other borrowed foreign words are treated, and very rarely change their forms in the processes of grammatical accidence. For instance, in Hindī, *ghōṛā*, a horse, has an oblique form "*ghōṛē*," because it is a Tadbhava, but *rājā*, a king, does not change in the oblique cases, because, and only because, it is a Tatsama. Now in all the modern vernaculars the verb must change its form in the processes of conjugation, while nouns are not necessarily changed in the course of declension. Hence Tatsamas are as a rule never treated as verbs. If it is found necessary to do so, it must be done with the help of another Tadbhava verb. For instance, the word *darśan*, seeing, is a Tatsama, and if we wish to use it in the phrase "he sees," we cannot say *darśanē*, but must employ the periphrasis *darśan karē*, he does seeing. On the other hand, in all the modern vernaculars nouns need not be declined synthetically. Borrowed nouns can always be declined analytically. Hence Tatsama nouns (which are necessarily declined analytically) are common, and, in the high literary styles of all the vernaculars, very common. Thus, although there are sporadic exceptions to the broad rule, it

* Tatsamas and Tadbhavas occur also in European languages. Thus "lapse" in "lapseus calami" is a Tatsama, and "lapse" is a semi-Tatsama, both meaning "a falling," while "lap" is the Tadbhava form of the word, with the different meaning of "the hanging part of a garment." Similarly "fragile" and "redemption" are semi-Tatsamas, while "frail" and "ransom" are the corresponding Tadbhavas.

may be laid down as a universal law that Indo-Aryan vernacular nouns may be either Tatsamas (including semi-Tatsamas) or Tadbhavas, but that Indo-Aryan vernacular verbs *must* be Tadbhavas.

During the last century, the introduction of printing and the spread of education has, in the case of some languages, introduced a fashion of using Tatsamas to which the wildest Johnsonese may almost be compared as a specimen of pure English. It has been proved by actual counting that in a modern Bengali work 88 per cent. of the words used were pure Sanskrit, every one of which was unnecessary and could have been represented by a vocable of true home growth. In such cases the result has been most lamentable.* The vernacular has been split into two sections—the tongue which is understood of the people, and the literary dialect, known only through the press and not intelligible to those who do not know Sanskrit.* Literature has thus been divorced from the great mass of the population, and to the literary classes this is a matter of small moment, for “this people, who knoweth not the law, are cursed.” As Mr. Baines says in the last census report, this Sanskritised form of Bengali is the product of what may be called the revival of learning in Eastern India consequent on the settlement of the British on the Hooghly. The vernacular was then found rude and meagre, or rather was wrongly considered to be such, owing to the absence of scholarship and the general neglect of the country during Mughul rule. Instead of strengthening the existing web from the same material, every effort was made in Calcutta, then the only seat of instruction, to embroider upon the feeble old frame a grotesque and elaborate pattern in Sanskrit, and to pilfer from that tongue whatever in the way of vocabulary and construction the learned considered necessary to satisfy the increasing demands of modern intercourse. He who trusts to the charity of others, says Swift, will always be poor; so Bengali, as a vernacular, has been stunted in its growth by this process of cramming with a class of food it is unable to assimilate. The simile used by Mr. Beames is a good one. He likens Bengali to an overgrown child tied to its mother’s apron-string, and always looking to her for help, when it ought to be supporting itself. Although Bengali displays the greatest weakness in this respect, and has lost all power of ever developing a vigorous literature, racy of the soil, until some great genius rises and sweeps away the enchantment under which it labours, other Indian vernaculars, especially Hindi, show signs of falling under the same malignant spell. The centre of Hindi literature is naturally Benares, and Benares is in the hands of the Sanskritists. There is no necessity as may have existed in the case of Bengali for Hindi to have recourse to the classical tongue. In themselves, without any extraneous help whatever, the dialects from which it is sprung are, and for five hundred years have been, capable of expressing with crystal clearness any idea which the mind of man can conceive. It has an enormous native vocabulary, and a complete apparatus for the expression of abstract terms. Its old literature contains some of the highest flights of poetry and some of the most eloquent expressions of religious devotion which have found their birth in Asia. Treatises on philosophy and on rhetoric are found in it, in which the subject is handled with all the subtilty of the great Sanskrit writers, and this with hardly the use of a Sanskrit word. Yet in spite of Hindi possessing such a vocabulary and a power of expression not inferior to that of English, it has become the fashion of late years to write books, not to be read by the millions of Upper India, but to display the author’s learning to a comparatively small circle of Sanskrit-knowing scholars. Unfortunately, the most powerful English influence has during this period been on the side of the Sanskritists. This Sanskritised Hindi has been largely used by missionaries, and the translations of the Bible have been made into it. The few native writers who have stood up for the use of Hindi undefiled have had a small success in the face of so potent an example of misguided efforts. Arguments may be brought forward in favour of using Classical Sanskrit words for expressing technical terms in science and art, and I am willing to admit their force. I am not one of those who (to quote a well-known example) prefer “the unthoroughness of stuff” to “the impenetrability of matter,” but there the borrowing from the parent language should stop. There is

* The newly-appointed minister to a Scotch parish had made a round of visits to his people. “He’s a rare fine, educated man, the new minister,” said an enthusiastic wife. “Ay, he’s a’ that,” returned the husband. “Ye dinna ken the meaning o’ the hauf o’ the words he uses”—*St James’s Gazette*

still time to save Hindī from the fate of Bengali, if only a lead is taken by writers of acknowledged repute, and much can be done in this direction by the use of a wise discretion on the part of the educational authorities of the provinces immediately concerned.

Influence of
Dravido
Mundā
languages:

509 The Aryans who entered India from the north-west were at an early stage brought into close contact with the aboriginal tribes. These almost certainly belonged chiefly to the Dravido-Mundā stock. The new-comers intermarried with them and adopted many of their customs. In the matter of language they borrowed a portion of their vocabulary. Thirty years ago, it was generally considered that these borrowings were large. Then the pendulum swung to the other extreme, and it was maintained with considerable vigour that there were hardly any at all. My own opinion is that the borrowings have been much more considerable than has been admitted by many scholars of late years, but that they were nothing like so universal as was once contended. The discussion has centred mainly round what are known as the cerebral letters of the alphabet. These letters did not occur in the original Aryan (i.e., Indo-Eranian) language, and, in Indo-Aryan languages, came into being on Indian soil. They are common in Dravido-Mundā languages, and in them are almost certainly original. The point in discussion was whether the Indo-Aryans borrowed them from the Dravido-Mundās, or whether they did not. Neither contention was correct. These letters occur with frequency in words of purely Aryan origin. It would be more accurate, in my opinion, to say that in many cases the pronunciation of Aryan words became changed under the influence of the example of the surrounding non-Aryan tongues, whose speakers many times exceeded the Indo-Aryans in numbers. Analogy did the rest, save that a certain number of words (principally names of things of which the Aryans had no previous experience in their Central Asian home) were directly borrowed. This is borne out by the fact that, where we have reason to believe that Dravido-Mundā influence was least strong, the use of these cerebral letters is most fluctuating. In Assamese, although the difference is maintained in writing, there is practically no distinction in pronunciation between the dental and the cerebral letters. It is probable, also, that in other cases the Dravido-Mundā languages have had an indirect influence on the development of the vernaculars. When there were two or three ways of saying the same thing, the tendency would be to use the idiom which was most like in sound to an expression meaning the same thing used by the surrounding non-Aryan tribes. Thus, in the Prakrit stage, there were many ways of expressing the dative. One of them consisted in suffixing the Aryan word *kahuñ* (derived from the Old Sanskrit *krītē*), and it had most chance of surviving, because it resembled the Dravidian dative suffix *ku*, or the Old Dravidian suffix from which the modern *ku* is derived. And so, owing to the existence of the suffix *ku*, although it had no connection with any Aryan language, this Aryan suffix *kahuñ* did survive to the exclusion of other dative suffixes in some of the Indo-Aryan vernaculars, and now appears in Hindī under the form of the familiar *kō*. Other similar instances of this indirect non-Aryan influence on the Aryan languages of India could easily be quoted. Two will suffice. In the progress of a word through the stage of the Secondary Prakrits, a medial hard consonant first became softened, and then disappeared. Thus the Old Sanskrit *chalati*, "he goes," first became *chaladi* and then *chalai*. Some of the Secondary Prakrit dialects remained for a much longer period than others in the stage in which the softened consonant is still retained. Nay, this softened consonant has in some cases even survived in the modern vernaculars. Thus the Old Sanskrit *sōka*, "grief," is *sōga*, not *sōa*, in Hindī. The occasional retention of this soft medial consonant can be explained by the influence and example of Dravidian languages in which it is a characteristic feature. In some Indo-Aryan languages of the Outer Circle, especially in Kāshmirī, Sindhi, and Bihārī, a final short *i* or *u* is not dropped, as is usual in the Inner languages, but is, so to speak, only half-pronounced, the mere colour, as it were, of the vowel being given to the final consonant. Thus the Sanskrit *mūrti*, "an image," becomes *mūrat* in the Inner Hindī, but is pronounced *mūrat* in the Outer Bihārī. This is also characteristic of Dravidian tongues.

Influence of
Indo-Chinese
languages

510. In vocabulary, the influence of Indo-Chinese languages upon those of the Indo-Aryans has been small. It is only apparent in Assamese and the corrupt Bengali of Eastern Bengal, in which a few Tibeto-Burman and Ahom words

can be traced. In Assamese, Tibeto-Burman influence has also been at work to prevent the use of the Dravidian pronunciation of cerebral letters. In the same language the use of pronominal suffixes with certain nouns, though undoubtedly of Aryan origin, is probably due to Tibeto-Burman influence. Their use with nouns has been dropped in neighbouring Aryan languages, but the example of Tibeto-Burman forms of speech (which, however, use prefixes not suffixes) accounts for their survival in Assamese. I think that another and more widespread example of the influence exercised by Tibeto-Burman languages may also be traced. It is an important point of idiom. In Old Sanskrit there were two ways of expressing the past tense. We might either say "I struck him" or "he was struck by me," "I went" or "I am gone." In the modern vernaculars only the second, the passive, construction survives. No modern Indo-Aryan language ever says "I struck him" or "I went," but all say "he was struck by me" or "I am gone." In Old Sanskrit there was a third way, which was only used with intransitive verbs. It was an impersonal construction, as in the phrase "it is gone by me" for "I went." This construction could not, in Sanskrit, be employed with transitive verbs, but it is common with them in the modern vernaculars, as in the Hindi sentence, *maiñ-nē us-kō māñ ā*, by me, with reference to him, striking was done. Now, this impersonal construction of transitive verbs is one of the most prominent peculiarities of Tibeto-Burman syntax, and it is probable that the Indo-Aryan tribes borrowed it at a very early period of their migration into India, although it was not admitted to the standard speech which developed into Classical Sanskrit.

511. The Indo-Aryan vernaculars have also been influenced by languages altogether strange to India. Contact with the tongues of foreign nations has affected their vocabularies to varying extents. The one which has had most influence is Persian, not the old Iranian language of pre-Musalmān times (though that has also contributed a small quota), but the Arabicised Persian of the Mughul conquerors. Thus, through Persian, the Indo-Aryan vernaculars have also received an important contribution of Arabic, and even some few Turkī, words. The influence of the Musalmān religion has opened another door for the entry of Arabic, and a few words have also been imported on the west coast from Arab traders. In the main, however, the Arabic element in all the Indian vernaculars, whether Aryan or not, came in with Persian, and as a part of that language. The pronunciation of the Persian words so imported is that of the Mughul times, and not the effeminate articulation of the land of the Lion and the Sun at the present day. The extent to which Persian has been assimilated varies greatly according to locality and to the religion of the speakers. Everywhere there are some few Persian words which have achieved full citizenship and are used by the most ignorant rustic, and we find every variation between this and the Urdū of a highly educated Muhammadan writer of Lucknow, who uses scarcely a single Indo-Aryan word except the verb at the end of his sentence. Under all circumstances, however, it is the vocabulary and but rarely the syntax which is affected. Only in the Urdū of the Musalmāns do we find the Persian order of words in a sentence. There has been no other introduction of Persian construction, nor are the Arabic words inflected (except by purists) according to their own rules, but they have to conform to the grammatical system of their host. So strong is the native instinct against the use of foreign constructions that Hindū writers class a dialect as Urdū, not on the basis of its vocabulary, but on the order of words which it employs. A well-known work was issued in the last century entitled "Tales in pure Hindī" It does not contain a single Persian word from cover to cover and yet Hindū writers class it as Urdū, because the writer orders his sentences in the Persian fashion. He was a Musalmān, and could not release himself from the habit of using idioms which had been taught him by Maulvis in his school-days.

512. Other foreign languages have also contributed to the vocabularies of the Indo-Aryan languages. They are principally Portuguese, Dutch, and English. The influence they have had is small, although some very common words are borrowed from these tongues. The use of the English vocables is growing, mainly owing to their use by employes of the railways, and by soldiers of the native army. The influence of a cantonment on language spreads far and wide.

Influence of
non-Indian
languages

The North-
Western
Group.

Language	Population returning it.
Kāshmirī . . .	1,007,957
Kōhistānī . . .	86
Lahndā . . .	3,337,917
Sindhī . . .	3,006,895
TOTAL, North-Western Group . . .	7,352,805

513. The North-Western Group of the Sanskritic Indo-Aryan vernaculars contains four languages, Kāshmirī, Kōhistānī, Lahndā, and Sindhī. They all belong to the Outer Circle, and are closely connected—so closely indeed, that Lahndā has been used to explain the meaning of difficult words in the Kashmir chronicles.

Kāshmirī

514. Kāshmirī has its home in the Valley of Kashmir, beyond the limits of which it is scarcely used as a national tongue. In the Punjab it is spoken by

Speakers of Kāshmirī in—	
The Punjab and North- West Frontier . . .	9,849
United Provinces . . .	100

In the Punjab, the largest numbers are in Amritsar (2,487), Chamba (1,775), Ludhiana (1,224), Kangra (782), and Lahore (752).

a non-Sanskritic tongue. Kāshmirī itself is a strongly Sanskritic language, and must have been imported from the south, but some of its words (even common ones, such as the word for “father”) cannot be derived from Sanskrit, and are identical with those found in the non-Sanskritic languages. Moreover, the lower orders in Kashmir affect that peculiar habit of hardening soft consonants, which is one of the most characteristic features of the latter. Kāshmirī has been studied during the past ten years; we have now a complete grammar, and a dictionary is under preparation. To the philologist it is of great interest, for we see in it a language which is, so to speak, caught in the act of transforming itself from the analytic to the synthetic stage. Owing to the extensive use which is made of epenthesis, its pronunciation is as difficult to foreigners as English is, and it possesses many broken vowel sounds which are not easily recorded in writing. Although the vernacular of so small an area, it is said to have at least three dialects, Kamrāzī, spoken in the northern portion of the valley, Mārāzī in the southern portion, and Yamrāzī round Srinagar, but the differences between them appear to be slight. Kishtwārī, spoken in the hills south-east of Kashmir, must be counted as a dialect of Kāshmirī, and so also the Pogul and the Rāmbanī of the hills south of the Banihal Pass. A more important division is between the Kāshmirī of the Musalmāns (who are many, and uneducated) and that of the Hindūs (who are few, and educated). Musalmān Kāshmirī abounds in foreign words borrowed from Persian, and often somewhat quaintly distorted. Hindū Kāshmirī is very free from admixture of Persian, and although the home language of Pandits, is singularly free from Tatsamas. Most of its copious vocabulary is composed of honest, sturdy, Tadbhavas.

Kishtwārī

Pogul,
Rāmbanī

Literature,
Alphabet

515. Kāshmirī has a considerable literature, a small portion of which has been published by German scholars. It has two alphabets, a modification of the Persian used by Musalmāns, and the ancient Śāradā character akin to Dēva-nāgarī, which is still used by Hindūs. The Serampur missionaries published a Kāshmirī version of the Scriptures in the Śāradā character early in the last century. Modern translations have been in the Persian script.

Kōhistānī

516. The River Indus, after leaving Baltistan, flows pretty nearly due west through the Chilas country, till it receives the River Kandīa, which takes its rise not far to the north in the maze of mountains between Chilas and Chitral. From this point to its entry into British territory, the Indus runs in a southerly direction through groups of hills, known collectively as the Indus Kōhistān, and inhabited by a number of wild tribes who all speak varieties of a language of Sanskritic Indo-Aryan origin, which is called Indus-Kōhistānī or Mayyāñ. To the west of the Indus-Kōhistān lie in order the valleys of the Swat, the Panjkora, and the Kunar. Those of the first two are known as the Swat- and Panjkora-Kōhistāns respectively. Here the language of the bulk of the people was formerly an Indian one, allied to Maiyāñ, but is now, owing to Pathān domination, almost invariably Pashtō. Only a faithful few still cling

Mayyāñ

to their ancient language, though they have abandoned their Aryan religion, and the dialects which they speak are called Gārwi and Tōrwāli. These three, Maiyāñ, Gārwi, and Tōrwāli, together form one well-defined group of dialects, Indo-Aryan in origin and evidently descended from the Old Sanskrit. They form a connecting link in the chain of North-Western Indo-Aryan languages commencing with Sindhī, and passing *via* Lahndā, through them, into Kāshmirī. This group can conveniently be called the Kōhistāni language. The tribes who speak it have never been famous for devotion to the politer arts, and it possesses no literature of any kind. Very little is known about it. Colonel Biddulph was the first to describe it, and through the kindness of Colonel Deane and Captain Dew, I have since been able to collect further materials, which allow us to set the language in its proper place in relation to the other tongues of India. The home of Kōhistāni lies outside the census area, and the few speakers who have been returned are temporary visitors to the Punjab.

517. Lahndā is a language the existence of which has long been recognised, but under many names. In the last Census Report it was called Jatki, but this, like Mūltāni, Western Panjābi, and other titles given to it, has the disadvantage of not being sufficiently comprehensive. It is not spoken only by Jats; it is not peculiar to Multan; and it is not a western dialect of the Panjābi of the Mānjh. I therefore think it best to give it the name which is indicated by the natives of the Punjab themselves, *i.e.*, Lahndā or the Language of the West (Panjābi, *Lahndē-dī Bōli*). It has no literature, and has no standard form, so that it is rather a group of connected dialects than a language with a definite standard. The eastern boundary of Lahndā may be taken as the River Chenab from the Kashmir frontier down to the town of Ramnagar in the district of Gujranwala. Thence it runs in a straight line to the north-east corner of Montgomery, and across that district to the south-west corner. It takes in the northern portion of Bahawalpur, and thence gradually merges through Siraikī into Sindhī. Its northern boundary may be taken as coinciding on the east with the range of mountains forming the southern limit of the Kashmir Valley, while to the west it skirts that valley and reaches as far north as the watershed dividing the Indus from the Jhelum Valley. Here it is bounded on the west by the Kōhistāni of the Indus Valley, till we reach the Hazara district. Thence the western boundary may roughly be taken as the Indus itself. These eastern and western boundaries are, however, very indefinite. Pashtō is spoken in several places close to the Indus, and, from the Indus westwards up to the Afghān mountain country, we find Lahndā also spoken, but principally by Hindūs, the Musalmān language being Pashtō. As we get further south into the Dērājāt, Lahndā more than holds its own, and is the principal language of the plains west of the Indus. On the east the boundary given is purely conventional. There can be no doubt that the Outer Prakrit from which Lahndā is derived once extended up to near the Sarasvatī and practically covered the whole ground now occupied by Panjābi. The expansion of the Aryan tribes which immigrated latest has, however, in later times occupied that tract with a population speaking one of the Inner Prakrits, who absorbed some of the characteristic features of the language of the original inhabitants. Such, for instance, are the Panjābi words for "we" and "you," *viz.*, "*asiñ*," "*tusiñ*," and the occasional dialectic use of pronominal suffixes. The further west and south we go, the more prominent are these peculiarities, so that the merging of Panjābi into Lahndā is exceptionally gradual even for an Indian language. Nay, it is not even correct to say that the eastern limit given above for Lahndā is the western limit of Panjābi. That language makes its influence felt far into the Lahndā tract proper. All that can be said is, that the line from Ramnagar to the south-west corner of Montgomery roughly separates the country in which the main features of the language are those of Lahndā from the one whose main linguistic features are those of Panjābi. It will thus be understood that, although Lahndā is in the main a language of the Outer Circle of Indo-Aryan languages, it is in some respects, varying according to locality, a mixed one.

The tract of country which at the present day is the special home of Lahndā, roughly corresponds with the ancient land of Kaikēya. If the evidence of the modern vernacular is to be accepted, the Kaikēyas must have spoken a language very similar to the Vṛachada Aṇabhramēa already alluded to. But amongst them there were members of another Aryan tribe, known as Piśāchas.*

* It is very probable that our Gipsies are the descendants of these Kaikēya Piśāchas.

These Piśāchas were most probably of the same race as those Indo-Aryans who settled in Chitral and Gilgit, and, at any rate, their home was in North-Western India. The Hindū grammarians have preserved for us the main features of their language, a characteristic point of which was the preservation of the letter *t* between two vowels. In the other Indian Prakrits such a *t* first became *d*, and was then elided altogether. It is an interesting confirmation of the correctness of the observations of these ancient scholars to observe that the same fact is noticeable, though to a less extent, at the present day in Lahndā and Panjābī. Panjābī usually has both forms, that with the *t* and that without; but, in such cases, Lahndā always preserves the *t* intact. Thus, the word for "sewn" is *sītā* in Lahndā, but *sītā* or *sīā* in Panjābī; "done" is Lahndā *kitā*, but Panjābī *kitā* or *kariā*; "drunk" is *pītā* in both Lahndā and Panjābī. In a pure Inner language, such as Hindī, the *t* would be dropped in all these cases, and we should have *sīā*, *kīā*, and *pīā*, or some such words. We thus see that Lahndā appears to have also borrowed peculiarities from yet another source than Panjābī.

Hindkō. The number of dialects of Lahndā is very great. The form of the language used in Hazara and to the west of the Indus is usually called Hindkī or Hindkō. Its special peculiarities have not yet formed the subject of study. East of the Indus they fall into two main groups, a northern and a southern. The dividing line may be taken as the southern foot of the Salt Range.

Pothwari. 518 The most important of the northern dialects are Pōthwārī and what Mr. Drew calls "Chibhālī." Pōthwārī is spoken over the submontane tract in the east of the districts of Gujrat, Jhelum, and Rawalpindi. The word Chibhālī properly means the language of the Chibhs, a tribe which is most numerous between Murree and Jammu, and who have no special language of their own. Drew, in his work on Kashmir, uses the name to mean the group of dialects which are spoken in the Murree Hills, and in the country through

The following forms of Lahndā have been reported from the Punjab, the North-West Frontier, and Baluchistan —

Dialect	Population returning it	Dialect.	Population returning it
Lahnda	350	<i>Dialects north of the Salt Range,—</i>	
Jatki	220,836	contd.	
Derañāl	526,577	Sawāñī	42,291
Chunāwar	165	Jandali	39,016
<i>Dialects north of the Salt Range.</i>		Khātrī	34,980
Awānkārī	621	<i>Dialects south of the Salt Range</i>	
Dhannī	11,711	Kāchhri	16
Ghēbī	74,082	Khētrāñī	98
Hindkī	661,288	Mūltāñī	961,997
Pōthwārī	226,542	Bahāwalpurī	580,036
Tināoli	2	Thalōchhri	1,555
Rēshī	3,011	Ubbē-dī bolī	1,924

Of the above Jatki is the language of the Jat population of Dera Ghazi Khan. Derañāl is found in Dera Ismail Khan. Chibhārī is spoken along the Chenab. Nearly all the speakers of Awānkārī, Dhannī, Ghēbī, and Pōthwārī, belong to Rawalpindi. Hindkī is principally found in Hazara and Rawalpindi. Rēshī (valley of the Rēsh), Sawāñī (valley of the Soan), Jandali and Khātrī (both north of Pindl Gheh) all belong to Rawalpindi. Bahāwalpurī is the Lahndā of Bahawalpur. Ubbē-dī bolī is the Ubbēchī of Sindh.

which the Jhelum flows from Kashmir to the plains, extending as far east as the Chenab so as to include Naoshera and Punch. The name is not a good one, for the Chibhs extend further to the east, and, moreover, are not by any means the only tribe in the area allotted to Chibhālī. The word is, however, a convenient one, and (with the above explanation) will, pending the completion of the Linguistic Survey, be employed in the sense given to it by Mr. Drew. Among the

Punchī. genuine dialects which fall under the general head of "Chibhālī" are Punchī, the language of Punch, and again, the dialect of the Kairāl country in the eastern hills of Hazara, and eastwards up the Jhelum Valley and as far as the Punch border, which some people call Dhundi from the tribe of Dhunds who are found (among others) in east Hazara. This so-called Dhundi is the language of the "Galīs" and of the hills round Murree. The exact relationship of Chibhālī to Lahndā is uncertain. The Linguistic Survey has not yet reached it, and its present classification is on the authority of Drew. It resembles Panjābī in many particulars, and may, finally, have to be allocated as a dialect of that language. Other northern dialects of Lahndā are the Tināoli of west Hazara (probably another of the Chibhālī dialects, and hence subject to the same reservations), Ghēbī of Rawalpindi, and Awānkārī of Jhelum, with a colony of its speakers across the Indus in Kohat.

519 South of the Salt Range, Lahndā is very generally known as "Mūltāñī."

Ghēbī
Awānkārī
Mūltāñī

The special form spoken round Multan is familiar to us from the vocabulary written by the late Mr. O'Brien, and we have also a full grammar based on the dialect of Shahpur, from the pen of Mr. Wilson. Another dialect, spoken in Northern Sind, is known as Ūbhēchī, *i.e.*, the language of the East. Several more dialect names have been recorded, but they are of little importance, the main distinction being into forms of speech used east and west of the River Jhelum, on which are founded a number of fanciful names, such as Kāchhī, the dialect of the alluvial valley, Thallī, the dialect of the sandy waste, which connote no idea of locality, unless we are told what valley and what waste are meant. Finally, on the west side of the Indus, there is one dialect of Hindkō to be mentioned. It is Khōtrānī, spoken by the Khētrān Balōches of Thal-Chōtiali. It is not a form of the Balōch language as is sometimes affirmed. Ūbhēchī
Khētrānī

520. Lahndā differs widely from Panjābī in vocabulary, more nearly approaching Sindhī in this respect. Some of its words are identical with Kāshmīrī vocables, and even with words once used in that language but no longer employed. It is, however, in its grammatical forms that the most characteristic differences from Panjābī are exhibited. Lahndā has a true future, of which the characteristic letter is *s*, and a true passive formed by suffixing *ī*, the former of which is strange to, and the latter of which is rare in, the language of the Mānjh. It also employs pronominal suffixes with all the freedom of its sisters Kāshmīrī and Sindhī, and has many postpositions which do not occur in Panjābī. The northern dialects are harsher and more nasal than the southern, and possess characteristic features of their own. Amongst them may be mentioned the use of the suffix *nā* instead of *dā* to form the genitive, the employment of an oblique form in the case of nouns ending in consonants, and the formation of the present participle. Lahnda compared with Panjābī

The Arab-Persian character is usually employed in writing Lahndā. A corrupt form of Dēva-nāgarī, seldom legible except to its writer, is also found. In 1819 Carey published an edition of the New Testament in this latter character in the dialect of Lahndā spoken round Uch. He called it the Uchchī language. Written character

521. Sindhī is spoken in Sind, on both sides of the lower Indus, commencing in the north at about latitude 29° N. On that side it merges into Lahndā, and on the east into the Mārwarī dialect of Rājasthānī. To the south it merges into Gujarātī through Kachchhī, and on the west it is bounded by the languages of Baluchistan. The population which speaks it being largely Musalmān, its vocabulary naturally borrows freely from Persian, and since the country has passed under British rule, an adaptation of the Arab-Persian alphabet has been used for writing it, although a debased form of the Dēva-nāgarī character is employed to a small extent for personal memoranda and accounts. This latter is so corrupt and incomplete that, when written, it can rarely be read by any one except the original scribe. Sindhī is not much spoken beyond the borders of Sind, except in the neighbouring States of Las Bela, Kachh, and Bahawalpur, but, the Sindhis being enterprising traders, they are found sporadically in most of the large towns of India, and even of Persia and Central Asia. Sindhī has three main dialects, Siraikī, Lārī, and Tharēli. The first is spoken in Siro or Upper Sind and Bahawalpur. It is a transitional form of speech between Sindhī and Lahndā, and it is as yet doubtful with which language it should finally be classed. The inhabitants of the Punjab speak of it as a dialect of Sindhī, while those of Sind describe it as a dialect of Panjābī, *i.e.*, Lahndā. Lārī is spoken in Lāru or Lower Sind. It is the literary dialect and the one dealt with in grammars of the language. Tharēli is spoken by the hunting and outcast tribes of the Tharu or Desert of Sind, which forms the political boundary between that province and Marwar. It is, like Siraikī, a transition dialect, but thus time between Sindhī and Mārwarī. Six hundred and fifty-one people have been returned as speaking Siraikī, but no figures are available for the other dialects. Owing to its isolated position, Sindhī has preserved many phonetic and grammatical peculiarities which have disappeared elsewhere, and is a typical speech of the Outer Circle of languages. To the present day it retains peculiarities which were recorded many hundred years ago as characteristic of the old Vṛāchada Apabhramśa from which it is descended. The Hindū grammarians also record a Pāśūchī dialect as spoken in the Vṛāchada country. The Pīśāchas, therefore, were once found in the country which is now Sind, alongside of the people who Sindhī
Siraikī
Lārī
Tharēli

then spoke Vṛāchada Apabhramśa, and whose descendants now speak Sindhi. As in the case of Lahndā, we again find corroboration of this by the fact that at the present day, like Lahndā, Sindhi possesses certain words which still retain a medial *l*.*

(Kachchhi) 522. To the south-east, Sindhi merges into Gujarātī through Kachchhi. Pending the completion of the survey, I have followed the usual custom of classing the latter form of speech as a dialect of Gujarātī. It is probable, however, that it should more properly be included under Sindhi. Under any circumstances it is a transition tongue. Gujarātī, itself, will be dealt with later on amongst the inner languages, of which it is certainly a member, although, like Panjābī, it occupies territory once held by some language of the Outer Circle. Leaving, therefore, Gujarātī for the present, we come to the Southern group

The Southern Group 523. The Southern Group of Sanskritic Indo-Aryan vernaculars consists of a single language. It is a group of dialects, not of languages. The one language is Marāthī.

Marāthī 524. Marāthī, in its various dialects, extends nearly across the Peninsula of India. In the Bombay Presidency it covers the north of the Deccan Plateau, and a strip of country between the Ghāts and the Arabian Sea, extending to about a hundred miles south of Goa. It is also the

Language	Population returning it
Marāthī . . .	18,237,899

language of Borar and of a good portion of the north-west of His Highness the Nizam's dominions. It stretches across the south of the Central Provinces (except in a few localities in the extreme south, where Telugu is the language), and occupies also a great portion of Bastar. Here it merges into Oriyā through the Bhatri dialect of that language. It

has to its north, in order from west to east, Gujarātī, Rājasthānī, Western Hindī, and Eastern Hindī. The first three are languages of the Inner group, and Marāthī does not merge into them. On the contrary, there is a curiously sharp border line between the two forms of speech. Its most eastern dialect, Halabī, does show points of contact with the neighbouring Chhattisgarhī dialect of Eastern Hindī, and shades off gradually into Oriyā, which is also a language of the Outer Circle. Oriyā is its neighbour to the east. On the south it has Dravidian languages, and it is bounded on the west by the Arabian Sea. In Marāthī we first meet in general use an interesting grammatical form known as the past participle and a resulting past tense, with the letter *l* as its characteristic. Thus, *uṭhīlā*, he rose. It extends through all the remaining languages of the Outer Circle, so that we have in Oriyā, *uṭhīlā*; in Bengali, *uthila*; in Bihari, *uthal*; and in Assamese, *uṭhīl*. It is also found, in a restricted use, in Gujarātī. This *l*-participle, therefore, not only extends over the whole of East-Aryan India, but reaches, through an unbroken chain of dialects all imperceptibly shading off into each other, to the Arabian Sea. This is illustrative of the intimate relationship which exists amongst all these forms of speech, and, although Assamese is widely different from Marāthī, and a speaker of one would be entirely unintelligible to the other, a man could almost walk for fifteen hundred miles, from Dibrugarh to Goa, without being able to point to a single stage where he had passed from one language to another. Yet he would have passed through four distinct

* I do not in any way mean to argue that either Lahndā or Sindhi is derived from a Paisāchi dialect. From the fact that both an Apabhramśa and a Paisāchi were spoken in Vṛāchada, we are entitled to maintain with considerable probability that the Paisāchas were not the same tribe as those who spoke Apabhramśa. They were therefore foreigners, and so, also, by parity of reason, were those of Kaikēya. Assuming that the home of the Paisāchas was somewhere in the country at the foot of the Pamirs, the natural course for emigration would be through the Swat Valley, down the Indus to the Kaikēya and Vṛāchada country. This would be in times when the original inhabitants, whom they found *in situ*, were in so early a stage of linguistic development that they still retained the original *l* in words like *pīlā* and so forth. The influence of the cognate language of the alien Paisāchas would account for speakers of Lahndā and Sindhi not dropping the *l*, when this had been done in the natural course of linguistic development further east. Such an influence would have more effect in the direction of conservation than in the direction of innovation, and hence we find no trace of other Paisāchi peculiarities (such as the change of *d* to *t*) which were strange to the original dialect. I freely admit that much of the above is pure theory, but I do not see my way to admitting the correctness of any explanation, other than the influence of some non-Sanskritic form of speech, for the retention of the *l* in these languages. Paisāchi supplies all the requirements of such a tongue, both in its locality and in its phonetic laws. Hindū grammarians also mention another form of Paisāchi spoken in Śūrasēna, i.e. in the Madhya dēśa. Can these have been subsequent emigrants from the sub-Pamir country who had joined their cousins, the descendants of those Indo-Aryans who formed the later immigration?

tongues of the Indian Continent, Assamese, Bengali, Oriyā, and Marāthī, and through many dialects.

525. Marāthī has a copious literature of great popularity. The poets wrote in the true vernacular of the country, and used a vocabulary mostly composed of honest Tadbhavas. The result is that the language at the present day is rich in them, and though the scholars for whom the Marāthā country is famous have in later times endeavoured with some success to heighten the style of the language by the use of Tatsamas, these parasites have not obtained that complete mastery over the literary form of speech that they have in Bengali. The country was not invaded by the Musalmāns till a comparatively late period, and was more or less successful in repelling the invasion, so that the number of words borrowed from or through Persian is small. As Mr. Beames says, Marāthī is one of those languages which may be called playful, it delights in all sorts of jingling formations, and has struck out a larger quantity of secondary and tertiary words, diminutives, and the like, than any of the cognate tongues.

526. The earliest Marāthī writers whose works have come down to us are Namdēva and Dnyānōbā, who flourished at the end of the thirteenth century and drew their inspiration from the early Vaishnava reformers. Śrīdhar (end of 16th century) is best known for his paraphrases of the Sanskrit Purānas, but the most celebrated of all was Tukārām or Tukōbā, a contemporary of Sivaji, who wrote in the first half of the seventeenth century. His "Abhangas," or loosely constructed hymns in honour of the God Vithōbā, are household words in the Marāthā country. The most famous successor of Tukārām was Mōrōpant (A D. 1720). As in the case of the other vernaculars of India, nearly all the earlier work is in verse, although there are some prose chronicles of varying importance.

527. No less than some fifty names have been recorded at various times as those of dialects of Marāthī. Few of these can be called genuine dialects, the majority being merely forms of the standard speech or of one of the real dialects, pronounced in some peculiar way according to locality or to the caste of the speakers. For instance, the Marāthī of the Konkan north of Ratnagiri is very nearly the same as the standard, but natives recognise two dialects, one spoken by the Brāhmins and another spoken by Musalmāns. The investigation of such minute differences may be a proper task for a linguistic survey, but is altogether out of place in a census report. We need, therefore, note only three main dialects of Marāthī, *viz.*, Dēśī, Kōnkanī, and the Marāthī of Berar and the Central Provinces. Khāndēśī which has hitherto been considered to be a dialect of Marāthī is more nearly allied to Gujarātī, and will be considered when dealing with that language.

528. Dēśī Marāthī is simply the standard form of the language, spoken in its purity round Poona. It has travelled far with the Marāthā conquerors, and there are large colonies of its speakers in Baroda, which is a Marāthā State, although locally in Gujarat, in Saugor, and in other parts of Central India. Several varieties of it are mentioned, of which we may name the Sangamēśwarī and the Bānkōtī of the Central Konkan, and Kudālī and Mālwanī, spoken lower down between Rajapur and Goa and in the State of Savantvadī. These four are transition forms of speech between the standard dialect and Kōnkanī. The lower classes of Thana and the neighbouring parts of Khandesh use another form of this dialect, usually known as Kunbāu after the name of one of the castes which employ it, and the Kōlis of Bombay, Thana, and Kolaba speak a mixture of it and Gujarātī. Kōnkanī is spoken in the Konkan south of Goa and throughout the districts of North Kanara and Belgaum. Goanese, itself, is a form of it. It differs more widely from standard Marāthī than any of the other dialects, and local pride sometimes leads to its being given the dignity of a distinct language. To the south it is mixed, in its vocabulary, with Kanarese and Tulu. Carey translated the New Testament into Kōnkanī early in the last century, and printed it in the Dēva-nāgarī character used for the other Marāthī dialects; but of late years the character employed is generally the Kanarese one, except in the case of the Portuguese missionaries and their converts, who employ the Roman alphabet.

Dialect	Population returning it
Dēśī	10,089,991
Kōnkanī	420,629
Marāthī of Berar and Central Provinces	4,800,591
Halabi	114,280
Others and unspecified	3,312,408
TOTAL, Marāthī	18,237,899

Sangamēśwarī
Bānkōtī.
Kudālī
Mālwanī

Kunbāu

Kōli
Kōnkanī

Warhādī

Warhādī or Berari is the dialect spoken in Berar and the neighbouring portion of Hyderabad. Historically, it should represent the purest Marāthī, for Berar corresponds to the ancient Vidarbha or Mahārāshtra. The political centre of gravity, however, in after centuries moved to the west, and with it the linguistic standard. The River Wardha, which separates the Central Provinces from Berar, may also be taken as the linguistic boundary between Nāgpurī and Warhādī. The latter dialect is, however, also found in Betul, in the Central Provinces, while, on the other hand, the Marāthī of Basim and of the western part of Buldana in Berar is not Warhādī, but more nearly approaches the dialect of Poona. The form of Marāthī spoken in the south of the Central Provinces is called Nāgpurī. It is practically the same as Warhādī, but varies according to locality, diverging further from the standard as we go east. In the Saugor district the Marāthī spoken is not Nāgpurī, but is the standard form of the language. This tract of country passed to us from the Peshwa and not from the Nāgpur Raj, and the Marāthī-speaking population came from Poona, not Nāgpur. They regard the true Nāgpur people with some contempt in consequence. The same is the case with the scattered Marāthā families of Damoh and Jubbulpore. In the extreme east of the Nāgpurī area, in the district of Balaghat, the dialect has changed so much that it has a separate name, and is called Marhēti. In this part of the Central Provinces, the districts of Balaghat and Bhandara are the eastern limit of Nāgpurī. Further east we are met by Chhattisgarhī, which is a dialect of Eastern Hindi. To the south Marāthī covers the northern portion of the district of Chanda (the south is occupied by Telugu), and gradually merges into Halabī. Halabī, also called Bastarī, has hitherto been nobody's child in the linguistic classification of India. It is, as the Linguistic Survey shows, a corrupt mixture of several languages, both Aryan and Dravidian, forming a transition tongue between Marāthī and Oriyā, but generally with a Marāthā backbone. The Halabī of Bastar is considered by Chhattisgarhī speakers to be Marāthī, and by Marāthī speakers to be Chhattisgarhī. This well illustrates its mixed nature. It is spoken in the central portion of Bastar, having Telugu to its south. In the north-east corner of Bastar we find a form of speech called Bhatrī. This is the link between Halabī and Oriyā, and is classed as a dialect of the latter language. It might with almost equal accuracy be described as one of the many forms of Halabī. Immediately to its east lies Oriyā itself. We have now brought Marāthī across India from the Arabian Sea to within a couple of hundred miles of the Bay of Bengal. Hitherto attention has been naturally fixed upon the particular dialect of it which is spoken in the Bombay Presidency, and it has been usually classed as the most south-western of the Aryan languages of India. It will have been seen that "Southern" describes it much more completely.

Nāgpurī
Dialect

Marhēti

Halabī
Dialect

Bhatrī

	Language	Population returning it
Eastern Group	Oriyā	9,687,429
	Bihārī *	34,579,844
	Bengali	44,624,048
	Assamese	1,350,846
TOTAL, Eastern Group		90,242,167

529. The languages of the Eastern Group are Oriyā, Bihārī, Bengali, and Assamese. It thus includes all the Aryan languages of India which, roughly speaking, are in use to the east of the meridian of Benares.

Oriyā

530. Oriyā or Utkalī is the Aryan language spoken in Orissa and in the country bordering on that province. To the north it includes a portion of the district of Midnapore, which, together with part of Balasore, was the Orissa of the phrase "Bengal, Bihar, and Orissa" found in the Diwānī grant and in the regulations framed by the Government in the last decades of the 18th century. It is also the language of the district of Singhbhum, belonging to the Division of Chota Nagpur, and of several Native States which fall politically within the same division. On the west it is the language of the greater part of the district of Sambalpur and of a small portion of the district of Raipur in the Central Provinces, together with the many Native States which lie between these districts

* The figures for Bihārī are approximate only. See below.

and Orissa proper. On the south it is the language of the north of the Madras district of Ganjam, with its connected Native States, and of the Jeypore Agency of Vizagapatam. It is thus spoken in three provinces of British India, and covers, say, 82,000 square miles.

531. It is called Oriyā, Odri, or Utkali, that is to say, the language of Odra ^{Name of} or Utkala, both of which are ancient names for the country now known as Orissa. ^{the language.} It is sometimes called Uriyā, but this name is merely a mis-spelling of the more correct "Oriyā." The earliest example of the language which is at present known consists of some Oriyā words in an inscription of the thirteenth century. An inscription dating a century later contains several sentences which show that the language was then fully developed, and differed little from the modern form of speech either in spelling or in grammar. It is bounded on the north by Bengali, on the north-west by Bihārī, on the west by the Chhattisgarhi dialect of Eastern Hindī, and on the south by Telugu. To the south-west it merges into the Halabī dialect of Marāthī through ^{Dialects} Bhatrī. This last is its only true dialect. Elsewhere it has local varieties of pronunciation and accent, but the standard is in the main closely followed over the whole Oriyā-speaking area. Bhatrī is the transition dialect to Marāthī, and the only specimens of it which ^{Bhatrī} I have seen were written in the Dēva-nāgarī (i.e., the Marāthī) alphabet, and not in the Oriyā one.

532. Oriyā is handicapped by possessing an excessively awkward and cumbrous written character. This character is, in its basis, the same as ^{Written} Dēva-nāgarī, but is written by the local scribes with a stylus on a talipot palm leaf. The scratches are themselves legible, but in order to make them more plain, ink is rubbed over the surface of the leaf and fills up the furrows which form the letters. The palm leaf is exceptionally fragile, and any scratch in the direction of the grain tends to make it split. As a line of writing on a long narrow leaf is necessarily in the direction of the grain, this peculiarity prohibits the use of the straight top line which is a distinguishing peculiarity of the Dēva-nāgarī character. For this, the Oriyā scribe is compelled to substitute a series of curves, which almost surround each letter. It requires remarkably good eyes to read an Oriyā printed book, for the exigencies of the printing press compel the type to be small, and the greater part of each letter is this curve, which is the same in nearly all, while the real soul of the character, by which one is distinguished from another, is hidden in the centre, and is so minute, that it is often difficult to see. At first glance, an Oriyā book seems to be all curves, and it takes a second look to notice that there is something inside each.

533. On the ground that its grammatical construction in some respects closely resembles that of Bengali, Oriyā has been more than once claimed by Calcutta ^{Connection} Pandits as a dialect of that language. They are, however, wrong. It is a sister, ^{with} not a daughter, and the mutual points of resemblance are due to the fact that ^{Bengali} they have a common origin in the ancient Māgadha Apabhramśa. It has the same weak sense of number as Bengali, and when the plural has to be expressed it is done, as in that language, by the aid of a noun of multitude. As in all the Eastern languages, the first and second persons singular of the verb are only used by the uneducated, or when respect is not intended. It has one great advantage over Bengali in the fact that, as a rule, it is pronounced as it is spelt. There are few of those slurred consonants and broken vowels which make Bengali so difficult to a foreigner. Each letter in each word is clearly sounded, and it has been well described as "comprehensive and poetical, with a pleasing sound and musical intonation, and by no means difficult to acquire and master." In Bengali, the accent is thrown back as far as possible, and, to assist this, the succeeding syllables are contracted or slurred over in pronunciation, but in the best Oriyā every syllable is distinctly pronounced, and the accent is put on the penultimate syllable if it is a long one, and never further back than the antepenultimate. The Oriyā verbal system is at once simple and complete. It has a long array of tenses, but the whole is so logically arranged, and built on so regular a model, that its principles are easily impressed upon the memory. It is particularly noticeable for the very complete set of verbal nouns, present, past, and future, which take the place of the incomplete series of infinitive and gerund which we find in Bengali, and for want of which that language is sometimes driven to strange straits in order

to embody the simplest idea. When Bengali wishes to express the idea embodied in what in Latin would be called the infinitive, it has to borrow the present participle for the occasion, and then has to employ it for all tenses, so that the word is used, in the first place, not as a participle, and, in the second place, not necessarily in the present tense. Oriyā, on the other hand, simply takes the appropriate verbal noun, and declines it in the case which the meaning necessarily requires. As every infinitive must be some oblique case of a verbal noun, it follows that Oriyā grammar does not know the so-called "Infinitive Mood" at all. The veriest beginner does not miss it, and instinctively makes up his "infinitive" or his "gerund" as he requires it. In this respect Oriyā grammar is in a more complete stage of development than even Classical Sanskrit, and can only be compared with the Old Sanskrit of the Vedic times. This archaic character, both of form and vocabulary, runs through the whole language, and is no doubt accounted for by its geographical position. Orissa has ever been an isolated country bounded on the east by the ocean, and on the west by hilly tracts inhabited by wild aboriginal tribes and bearing an evil reputation for air and water. On the south, the language is Dravidian, and belongs to an altogether different family, while, on the north, it has seldom had political ties with Bengal.

Influence of
other
languages.

534. On the other hand, Orissa has been a conquered nation. For eight centuries it was subject to the kings of Telinga, and, in modern times, it was for fifty years under the sway of the Bhōṇslās of Nagpur, both of whom have left deep impressions of their rule upon the country. On the language they have imposed a number of Telugu and Marāthī words and idioms which still survive. These are, so far as we know, the only foreign elements of importance which have intruded into Oriyā. There are also a few Persian words which have come from the Musalmāns, and a small vocabulary of English Court terms and the like, which English domination has brought into vogue. Oriyā has a fairly large literature, mainly composed of religious poetry, that relating to Krishna being most prominent. As a vernacular, it is almost confined to its proper home, though speakers of the language are found in various localities of India, where they are mainly either domestic servants or pālki bearers.

Literature

Bihārī

535. The Province of Bihar was for centuries much more closely connected politically with the United Provinces of Agra and Oudh than with Bengal. Even so early as the time of the Sanskrit epic of the Rāmāyan, Rāma-chandra, the Prince of Oudh, is represented as taking his famous bride, Sitā, from the country of Mithilā, or the present North Bihar. The face of the Bihārī is ever turned towards the north-west; from Bengal, he has only experienced hostile invasions. For these reasons, the language of Bihar has often been considered to be a form of the "Hindī" said to be spoken in the United Provinces, but really nothing can be further from the fact. In spite of the hostile feeling with which Bihāris regard everything connected with Bengal their language is a sister of Bengali, and only a distant cousin of the tongue spoken to its west. Like Bengali and Oriyā, it is a direct descendant of the old Māgadha Apabhramśa. It occupies the original seat of that language, and still retains nearly all its characteristic features. In one particular of pronunciation alone does it depart from its parent, viz., in the pronunciation of the sibilants. This is accounted for by the political influence of the North-West. The pronunciation of these letters is a literal shibboleth between Bengal and Central Hindostan. A man who pronounces his s's as if they were sh, would at once be known as a Bengali, and treated as such. The Bihāris, therefore, in their desire, which has existed for several centuries, to sever all connection with the people to their east, have striven after the pronunciation of the s's of the west, and have now acquired it; but that it is a modern innovation is clearly shown by the fact that, although they pronounce s, they always still write sh, and use the very character which the Hindū grammarians employed to illustrate the sh-sound which was so characteristic in their time of the tongue of Magadha.

Where
spoken

536. Bihārī is not only the vernacular of Bihar, but is also spoken far beyond the limits of that province. To the west it is spoken in the eastern districts of the United Provinces, and even in a small portion of Oudh. Its western boundary may be roughly taken as the meridian passing through Benares, although it really extends a short distance beyond that city. On the south it is spoken in the two plateaux of Chota Nagpur. It extends from the Himalaya on the

north to Singbhum (an Oriyā-speaking district) on the south, and from Manbhum on the south-east to Basti in the north-west. The total area covered by it is about 90,000 square miles. Its linguistic boundaries are Bengali to the east, the Himalayan tongues to its north, Eastern Hindi to its west, and Oriyā to its south.

537. The number of speakers of Bihārī can only be given approximately. No distinction could be made by the enumerators (who were mostly uneducated) between Bihārī and Hindī, and hence it was found necessary to show both under the latter name in the schedule. In the United Provinces, the tables have been adjusted so that the districts of which Bihārī is known to be the vernacular have Bihārī assigned to them, all entries of Hindī (with the necessary adjustments) for these districts being shown as Bihārī. This gave a total of 10,056,056 for the United Provinces, which, taken as an estimate, and only as an estimate, is nearly correct. To this a small number of speakers of admitted Bihārī in other parts of India being added, we get the total of 10,296,816. This, however, takes no account of more than double this number of speakers of Bihārī, whose home is Bihar, in Bengal. Here the problem was much more complicated. It was found impossible to show, by any geographical process, how many of the people returned as speaking "Hindī," (26,780,174) really spoke Bihārī. The great majority of them did do so and hence in the tables for all India, the whole of the "Hindī" speakers in Bengal have been classed under Bihārī. In attempting to show figures which were more nearly accurate, all that Mr Gait could do was to give, as a rough approximation, the number of speakers of Bihārī in the Lower Provinces of Bengal as 24,283,028. In this chapter, I add this amount to the figures we have already got for Bihārī, giving a total for this language of 34,579,844. There remains a balance, from the "Hindī" figures of Bengal, of 2,497,146, which I distribute between Eastern Hindi and Western Hindi, as explained under those languages.

Bihārī has three main dialects; Maithili, Magahī, and Bhojpuri. Each of these has several sub-dialects. Maithili or Tirhutīā is spoken over Tirhut, a part of Champaran, Eastern Monghyr, Bhagalpur, and Western Purnea. It is found in its greatest purity in Darbhanga, and has a small literature going back to the fifteenth century. Vidyāpati Thākur, who lived about that time, was a Sanskrit writer of some repute, and one of his works, translated into Bengali, has for years been the terror of examinees in that language. But it is upon his dainty songs in his own vernacular that his fame chiefly rests. He was the first of the old Master Singers whose short religious poems, dealing principally with Rādhā and Krishna, exercised such potent influence on the faiths of Eastern India. His songs were adopted and enthusiastically recited by the celebrated Hindū reformer Chaitanya (flourished 16th century), and, through him, became the house poetry of the Lower Provinces. Numbers of imitators sprung up, many of whom wrote in Vidyāpati's name, so that it is now difficult to separate the genuine from the imitation, especially as in the great collection of these songs which is the accepted authority in Bengal, the former have been altered in the course of generations to suit the Bengali idiom and metre. Vernacular literature has also had several dramatic authors in Bihar, the local custom being to write the body of a play in Sanskrit but the songs in Maithili. There have also been some epic poems, of which at least one has survived in part. One of the earliest translations of the Gospels and Acts into any Northern Indian language was made into Maithili by the celebrated missionary Father Antonio at the end of the eighteenth century.

Dialect	Approximate Population speaking it
Maithili . . .	10,387,898
Magahī . . .	6,584,407
Bhojpuri . . .	17,387,078
Pürbi . . .	236,269
Not identified . . .	4,112
TOTAL, Bihārī . . .	34,579,844

538. Magahī is spoken in South Bihar and Hazaribagh. It does not extend beyond the northern of the two plateaux of Chota Nagpur. It has no written literature, but Carey translated the New Testament into it in 1818 and some folk-tales and songs have been collected and printed. The locality in which Magahī is now spoken corresponds to the ancient Māgadha, and was therefore the head-quarters of the ancient Māgadha Apabhramśa.

539. Bhojpuri is properly speaking the language of Bhojpur, the name of a town and pargana in the north-west of the district of Shahabad. It

connotes, however, the language spoken over a much wider area. It occupies the whole of West Bihar and of the eastern portion of the United Provinces. It also covers the district of Palamau, and the southern or Ranchi plateau of Chota Nagpur. It varies according to locality, the tongue of Azamgarh and Benares differing somewhat from that of Shahabad and Saran, another division of forms being between the Bhojpuri spoken south, and that spoken north of the Ganges. It has one important sub-dialect, the Nagpuriā of Chota Nagpur, and natives also recognise, by using separate names, the Madhēsī Bhojpuri spoken in Champāran, the Sarwariā of Basti and the neighbourhood, and the Tharui or broken dialect spoken by hill tribes of the Himalaya. These are refinements of small importance. The three main sub-dialects are the Standard, the Western, and Nagpuriā. Western Bhojpuri is frequently called "Pūrbi," or "the language of the East" *par excellence*. This is naturally the name given to it by the inhabitants of Western Hindostan, but has the disadvantage of being too indefinite. It is used very loosely, and often includes languages which have nothing to do with Bhojpuri, simply because they are spoken to the "East" of those who refer to them. Bhojpuri has a very small literature, all written in the last few years. So far as I am aware, no portion of the Scriptures has been translated into it.

Relationship
of the three
dialects to
each other.

540. These three dialects fall naturally into two groups, *viz.*, Maithili and Magahi on the one hand and Bhojpuri on the other. The speakers are also separated by ethnic peculiarities, but Maithili and Magahi and the speakers of these two dialects are much more closely connected together than either of them is to Bhojpuri. I shall here content myself with noting the most characteristic differences which strike the most casual observer. In pronunciation Maithili, and to a less degree Magahi, is much rounder than Bhojpuri. In Maithili, the vowel *a* is pronounced with a broad sound approaching the "o in hot" colour which it possesses in Bengali. Bhojpuri, on the contrary, pronounces the vowel with the clear sharp cut tone which we hear all over Central Hindostan. On the other hand, it also possesses a long drawled vowel which is pronounced like the *aw* in *awl*. The contrast between these two sounds is so very marked, and is of such frequent occurrence, that it gives a tone to the whole language which is recognised at once. In the declension of nouns Bhojpuri has an oblique form of the genitive case, which is wanting in the other dialects. The polite pronoun of the second person, which is very frequently heard in conversation, is *apane* in Maithili and Magahi, but *raure* in Bhojpuri. The verb substantive in Maithili is usually *chhai* or *achhi*, he is. In Magahi it is usually *hai*, and in Bhojpuri *bāṭē*, *bāṛē*, or *hāwō*. The three dialects all agree in forming the present tense by adding the verb substantive to the present participle, exactly as in other modern Indian languages. But Magahi has also a special form of the present, *viz.*, *dēkha hai*, exactly equivalent to the English "he is a-seeing," and so has Bhojpuri another form *dēkhā-lā*, which probably means "he is come to see." The whole system of verbal conjugation is amazingly complex in Maithili and Magahi, but is as simple and straightforward in Bhojpuri as it is in Bengali or Hindi. There are many other minor differences between the three dialects, but the above are those which are most characteristic and striking. Suffice it to say, further, that Maithili and Magahi are the dialects of nationalities which have carried conservatism to the excess of uncouthness, while Bhojpuri is the practical language of an energetic race, which is ever ready to accommodate itself to circumstances, and which has made its influence felt all over India.

Ethnic
differences

541. The last remark brings us to the consideration of the ethnic differences between the speakers of Maithili and Magahi on the one hand, and those who speak Bhojpuri on the other. These are great. Mithilā, a country with an ancient history, traditions of which it retains to the present day, is a land under the domination of a sept of Brāhmins extraordinarily devoted to the mint, anise, and cummin of the law. For centuries it has been too proud to admit other nationalities to intercourse on equal terms, and has passed through conquest after conquest, from the north, from the east, and from the west, without changing its ancestral peculiarities. The story goes that at the marriage of Rāma, the Brāhmins of Mithilā showed the same uncivilised pride which is characteristic of their descendants in the twentieth century. This Brahmanical domination has left ineffaceable marks upon the nature of the rest of the population. Mithilā, or Tirhut, is one of the most congested parts of India.

Its inhabitants increase, and multiply, and impoverish the earth, nor will they seek other means of life than agriculture, or other lands on which to practise the one art with which they are acquainted. Magadha, on the other hand, although it is intimately connected with the early history of Buddhism, was too long a cockpit for contending Musalmān armies, and too long subject to the head-quarters of a Musalmān province, to remember its former glories of the Hindū age. A great part of it is wild, barren, and sparsely cultivated, and over much of the remainder cultivation is only carried on with difficulty by the aid of great irrigation works widely spread over the country, and dating from prehistoric times. Its peasantry, oppressed for centuries, and even now, under British rule, poorer than that of any neighbouring part of India, is uneducated and unenterprising. There is an expressive word current in Eastern Hindostan which illustrates the national character. It is "*bhādē*," and has two meanings. One is "uncouth," "boorish," and the other is "an inhabitant of Magadha." Which meaning is the original and which the derivative, I do not know, but a whole history is contained in these two syllables.

542. The Bhojpuri-speaking country is inhabited by a people curiously different from the others who speak Bihārī dialects. They form the fighting nation of Hindostan. An alert and active nationality, with few scruples and considerable abilities, dearly loving a fight for fighting's sake, they have spread over Aryan India, each man ready to carve his fortune out of any opportunity which may present itself. They have furnished a rich mine of recruitment to the Hindōstānī army, and, on the other hand, they took a prominent part in the Mutiny of 1857. As fond as an Irishman is of a stick, the long-boned, stalwart Bhojpuri, with his staff in hand, is a familiar object striding over fields far from his home. Thousands of them have emigrated to British Colonies and have returned rich men; every year still larger numbers wander over Northern Bengal, and seek employment, either honestly, as *pālki*-bearers, or otherwise, as dacoits. Every Bengal Zamindār keeps a posse of these men, euphemistically termed "*darwāns*," to hold his tenants in order. Such are the people who speak Bhojpuri, and it can be understood that their language is a handy article, made for current use, and not too much encumbered by grammatic subtleties.

543. Throughout the Bihārī area, the written character is that known as *Kaithī*. This script is used over the whole of Hindostan alongside of the more complete and elegant *Dēva-nāgarī*. Practically speaking, the former may be looked upon as the current hand of the latter, although epigraphically it is not a corruption of it as some think. *Kaithī* is the official character of two widely distant countries, Bihar and Gujarat, and a Tirhut Patwārī finds little difficulty in reading a Gujarātī book. The Brāhmans of Tirhut employ a special character of their own, called the Maithilī script. It closely resembles that used for Bengali, but differs from it just enough to make it at first sight rather puzzling to read. Written Character.

544. Bengali is the language of the Gangetic Delta, and of the country immediately to its north and east. North of the Ganges its western boundary may be taken as the River Mahananda in the east of the district of Purnea. South of the Ganges it reaches up to the foot of the Chota Nagpur plateaux. It covers the greater part of the district of Midnapore, and that tract of Singhbhum which is known as Dhalbhum. To the east, it runs a short way up the Assam Valley, taking in about half the district of Goalpara, and, in the Surma Valley, it covers the whole of Sylhet and Cachar, as well as Mymensingh and Dacca, although here the ground is partly occupied by Tibeto-Burman languages, whose speakers are found in scattered colonies. Further south it is spoken in Noakhali and Chittagong, and even in parts of the hill tracts of the latter district and of Arakan. To its north, it has the Tibeto-Burman languages of the Himalaya, to its west Bihārī, to its south-west Oriyā, and to its east Tibeto-Burman languages and Assamese. On the south, it is bounded by the Bay of Bengal. In no other speech of India is the literary tongue so widely divorced from that of ordinary conversation as in Bengali. The two can almost be spoken of as distinct languages, rather than as two dialects of the same languages. Up to the last few years very little was known about the actual speech of the forty odd millions who are recorded as having Bengali for their vernacular. Even European grammarians, most of whom were missionaries and ought to have known better, were the obedient slaves of the Pandits of Calcutta, and only illustrated the artificial book language in their works. Bengali. Mr.

Beames was the first, and I believe the only writer, to draw attention in the concluding decades of the last century to the necessity of putting on record what the people really spoke.* Since then the Linguistic Survey has succeeded in exploring the Bengali dialects with considerable success.

Dialects.

545. In dividing the language into dialects, the lines of cleavage may be either horizontal or perpendicular. Adopting the former method, we get this literary dialect on the one hand, and the true vernacular on the other. The former is practically the same over the whole of Bengal, but is only used in books and newspapers, or when speaking formally. On other occasions, speakers of Bengali sink back into a more or less refined version of the second dialect. Between these two, there is not merely the same difference that exists between the language of the educated and the uneducated, say, in England. The dissimilarity is much greater. It departs from the colloquial dialect, not only in having a highly Sanskritised vocabulary, but also in its grammatical forms. The grammar of literary Bengali is nowhere used in conversation. The colloquial grammatical forms are much contracted. Words which, in the literary language, pronounced *ore rotundo* have four syllables, are in this reduced to two, so that a mere knowledge of the former (and this is all that every grammar except that of Mr. Beames provides) is of little assistance towards understanding or speaking the latter.

546. The lines of perpendicular cleavage affect only the colloquial form of Bengali. There are several dialects of this, but the change from one to another is so gradual that it is impossible to say where any one of them begins or ends. We may, however, easily recognise two main branches, a Western and Eastern. The Western includes the standard dialect spoken round Hooghly, the curious south-western dialect spoken in central Midnapore, and the Northern Bengali used between Purnea and Rangpur. In Western Bengal, the language has been affected by the neighbouring Bihārī, and we also, in the same locality, find some broken forms of speech employed by the hill tribes. The principal of these is the Māl Pahārī of the Sonthal Parganas and Birbhum which has hitherto been thought to be a Dravidian language. In Northern Bengal, the Tibeto-Burman Koches have long ago abandoned their own language, but traces of it are found in the Bengali which they speak, which increase as we go eastwards towards their original home on the Brahmaputra. In Purnea, the Bengali used is much mixed with the adjoining Maithili Bihārī, and the Kaithī character of Bihar is even used for recording the Bengali language.

547. The centre of the Eastern branch may be taken as the district of Dacca, where what may be called Standard Eastern Bengali is spoken. The true eastern dialect is not spoken west of the Brahmaputra, though, when we cross the river, coming from Dacca, we meet a well-marked form of speech spoken in Rangpur and the districts to its north and east, called Rājbangshī, which, while undoubtedly belonging to the eastern branch, has still points of differences which lead us to class it as a separate dialect. In the Darjeeling Tarai it is known as Bāhē. The characteristic signs of Eastern Bengali are first noticeable in the districts of Khulna and Jessore, and are found all over the eastern half of the Gangetic delta. It then extends in a north-easterly direction following the valleys of the Megna and its affluents over the districts of Tippera, Dacca, Mymensingh, Sylhet, and Cachar. In every direction its further progress is stopped by the hills which bound these regions, and throughout the Surma Valley and in Mymensingh, we also find a mongrel dialect spoken by some of the less civilised tribes, called Haijong or Hājong, which is a mixture of Bengali and Tibeto-Burman languages. Along the eastern

* The result of the influence of Pandits upon Bengali would be well illustrated if we took a passage of narrative English, and substituted a Latin word for every noun that occurred. Theoretically the nouns should be in Anglo-Saxon, but to an Englishman, Latin more nearly holds the position of a learned language than Sanskrit does in India. As an example, I here give a verse or two of the Parable of the Prodigal Son, with a Latin word (gender and case being usually neglected) substituted wherever the Bengali version employs a Sanskrit one;—"A certain vir had two filios. And the junior filius medio of them said to his pater, 'pater give me the pars of the substantia that falleth to me.' And he made divisio unto them of his proprius facultas. And not multus dies after the junior filius made omnis substantia collectus and became peregre profectus into a regio longinqua." In this extract the Latin words are taken from Beza's translation. No wonder that a Bengali villager starts and stares in the witness box when asked to repeat (and expected to understand) a form of asseveration couched in language analogous to the above.

litoral of the Bay of Bengal there is a south-western dialect, also of the Eastern Chākma 48,931 type, and inland there is another curious dialect, called Chākma, spoken by tribes of the Chittagong Hill Tracts. This last has a character of its own, similar to, but more archaic than, the one used for writing Burmese. Probably only a variety of Chākma is Daingnet, a corrupt form of Daingnet 3,105 Bengali, hitherto considered to be a Tibeto-Burman language. It is spoken in that part of the Akyab district which adjoins Chittagong. Except as given above, no figures are available for the Bengali dialects.

548. Some remarks must be made regarding the extraordinary way in which the many Sanskrit words used in the literary dialect are pronounced in Bengali. It should be remembered that these words are just as foreign to the language as French words are to English, so that Bengalis pronounce their Sanskrit words much in the way that Englishmen speak "Frenche ful fayre and fetisly, after the scole of Stratford atte bowe." During the period in which the Prakrits represented the spoken language of India, the vocal organs of the Indo-Aryan were incapable of pronouncing without difficulty letters and sounds which had been easy to their forefathers. As they pronounced them differently, they spelt them differently, and owing to the records left by the Hindū grammarians we know how they did pronounce them. When they wanted to talk of the Goddess of Wealth, whom their ancestors had called Lakshmi, they found that it cost them too much trouble to pronounce *kshmi*, and so they simplified matters by saying, and writing, *Lachchi* or, dialectically, *Lakchi*. Again, when they wanted to ask for cooked rice, which their forefathers called *bhakta*, they found the *kt* too hard to pronounce, and so said, and wrote, *bhatta*, just as the Italians find it difficult to say *factum*, and say, and write, *fatto*. Again, some of them could not pronounce an *s* clearly, so they had to say *sh*. When they wanted to talk of the sea, they could not say *sāgara*, but said, and wrote, *shāgara*, or *shāyara*. As a last example, if they wanted to express the idea conveyed by the word "external," they could not say *bāhya*, and so they said, and wrote, *bajjha*. Now, I have already explained that the modern Bengali is descended from an Apabhramśa closely connected with that very Māgadhi Prakrit from which the above examples are all taken. The very same incapacities of the vocal organs exist with Bengalis now, that existed with their predecessors a thousand years ago. A Bengali cannot pronounce *kshmi* any more than they could. He cannot pronounce a clear *s*, but must make it *sh*. The compound letter *hy* beats him, and instead he has to say *jih*. These are only a few examples of facts which might be multiplied indefinitely. Nevertheless, a Bengali when he borrows his Sanskrit words writes them in the Sanskrit fashion, which is, say, at least two thousand years out of date, and then reads them as if they were Māgadhi Prakrit words. He writes *Lakshmi*, and says *Lakchi*. He writes *sāgara*, and says *shāgar*, or, if he is uneducated, *shāyar*. He writes *bāhya*, and says *bajjha*. In other words, he writes Sanskrit, and reads from that writing another language. It is exactly as if an Italian were to write *factum*, when he says *fatto*, or as if a Frenchman were to write the Latin *sicca*, while he says *sèche*. The outcome of this state of affairs is that, to a foreigner, the great difficulty of Bengali is its pronunciation. Like English, but for a different reason, its pronunciation is not represented by its spelling. The vocabulary of the modern literary language is almost entirely Sanskrit, and few of these words are pronounced as they are written. Bengalis themselves struggle vainly with a number of complicated sounds, which the disuse of centuries has rendered their vocal organs unable, or too lazy, to produce. The result is a maze of half-pronounced consonants and broken vowels not provided for by their alphabet amid which the unfortunate foreigner wanders without a guide, and for which his own larynx is as unsuited as is a Bengali's for the sounds of Sanskrit.

549. Bengali has a genuine popular literature extending from at least the fifteenth-century to the end of the eighteenth. Since then the so-called "revival of learning" has galvanised into a vigorous existence the Bengali literature of the present day, largely based upon English models, containing many excellent works and some few of genius, but not popular in the true sense of the word. Of the early authors, perhaps Chandi Dās and Mukunda Rām are the two whose writings will best repay perusal. Their writings come from the heart

and not from the school, and are full of passages adorned with true poetry and descriptive power. Extracts from the works of Mukunda Rām have been admirably translated into English verse by the late Professor Cowell.

Written
character.

550. The well-known Bengali character is a by-form of the Nāgarī type of Indian alphabets, which became established in Eastern India about the eleventh century of our era. Varieties of it are used for Assamese, and by Brāhmins for the Maithili dialect of Bihārī.

Assamese.

551. Assamese is the last of the speeches of the Outer Circle. As its name implies, it is the language of the Assam Valley, over the whole of which it is the only Aryan tongue, except in the extreme west, where, in the district of Goalpara, it merges into Bengali. Elsewhere it is surrounded entirely by Indo-Chinese languages. The influence of the latter on Assamese has not been great. A few words have been borrowed, and one or two old Aryan forms (such as the use of pronominal suffixes) have been retained, owing to the existence of somewhat similar idioms prevailing amongst the neighbouring tribes. Western Assamese differs slightly from that spoken at the eastern end of the valley, but the only true dialect is the Mayāng or Bishnupuriyā, spoken by a Hindu colony in the State of Manipur and by scattered members of the same tribe in Sylhet and Cachar. From its geographical position we should expect Mayāng to be a dialect of Bengali rather than of Assamese, and it would not be wrong to class it as the former. I, however, place it under Assamese, as it has several of the typical characteristics of that language. We may also mention a mongrel trade language, which has developed at the foot of the Garo Hills under the name of Jharwā. It is a "pigeon" mixture of Bengali, Gārō, and Assamese. The Assamese are a home-staying people, and the only localities in which their language is found spoken by any considerable number of people outside the Assam Valley are the hills of that Province, and the Bengali-speaking districts of Sylhet and Cachar.

Mayāng

552. Like Oriyā, Assamese is a sister, not a daughter, of Bengali. It comes from Bihar, through Northern Bengal, not from Bengal proper. It was, nevertheless, once hotly argued whether Assamese was a dialect of Bengali or not. A great deal of this is a mere question of words which is capable of discussion *ad infinitum*. The words "dialect" and "language" are no more capable of mutually exclusive definition than are "variety" and "species" or "hill" and "mountain." It may be admitted that Assamese grammar does not differ to any considerable extent from that of Bengali; but, if we apply another test, that of the possession of written literature, we can have no hesitation in maintaining that Assamese is entitled to claim an independent existence as the speech of an independent nationality, and to have a standard of its own, different from that which a native of Calcutta would wish to impose upon it.

Assamese
compared
with Bengali

553. Assamese differs most widely from Bengali in its pronunciation. It has, besides the usual sound of *a* as *o* in "hot," a long drawled *a* something like the sound of the *o* in "glory." Little distinction is made between long and short vowels, accent having everywhere superseded quantity, as in modern Greek. No difference is made between the cerebral and dental consonants, both being sounded as semi-cerebrals like the English *t* and *d*. The consonants *ch* and *chh* have the sound of *s* in "sin" and *j* that of *z* in "azure." On the other hand, the letter *s* is pronounced with a guttural sound approaching that of *ch* in "loch." The declension of nouns does not differ materially from that of colloquial (not literary) Bengali, but the conjugation of verbs has many characteristic features in points of detail which need not be mentioned here. The Assamese vocabulary, even when used in literature, is much more free from Tatsamas than is Bengali.

Literature

554. The Assamese have just reason to be proud of their national literature. In no department have they been more successful than in a branch of study in which India as a rule is curiously deficient. The chain of historical events for the last six hundred years has been carefully preserved, and their authenticity can be relied upon. These historical works, originally written in imitation of the chronicles kept by the Āhom conquerors of the country, and still called by their Āhom name, are numerous and voluminous. According to the customs of the country, a knowledge of these histories was an indispensable qualification to an Assamese gentleman; and every family of distinction, as well as the Government and public officers, kept the most minute records of contemporary events. But Assamese literature is by no means confined to history. Some seventy poetical works, principally religious, have been catalogued. One of the

oldest poets, and at the same time the most celebrated, was Śrī Śankar Dēv, who flourished about four hundred and fifty years ago. The Hindū system of medicine was professionally studied by numerous Assam families of distinction, and some knowledge of the science formed one of the necessary acquirements of a well-bred gentleman. Hence arose a good stock of medical works, principally translations or adaptations from Sanskrit into the vernacular. We know of at least forty dramatic works written during the past five hundred years, and many of these are still acted in the village *nāmghars*. The whole of the Scriptures was translated into Assamese by the Serampore missionaries in the year 1813, and several editions have since been issued. In later years, the American Baptist Mission Press has published a large number of works religious and lay, and has done much to keep the language pure and uncontaminated by the neighbouring Bengali.

555. The character used in writing Assamese is nearly the same as that employed for Bengali. It has one sign, that to represent the sound of *wo*, which is wanting in the alphabet of that language. Written character.

556. We now come to the form of speech which is intermediate between the Outer Circle and the Inner languages. It is the vernacular of the country in which the hero Rāma-chandra was born; and the Jain Apostle Mahāvira used an early form of it to convey his teaching to his disciples. The Prakrit of that tract, Ardha-Māgadhi, hence became the sacred language of the Jains, and its modern successor, Eastern Hindī, through the works of a great genius, became the medium for celebrating the Gestes of Rāma, and in consequence the dialect used for nearly all the poetry of Hindostan. Mediate Group
Eastern Hindī.

557. Eastern Hindī, which includes three dialects, Awadhī, Baghēli, and Chhattisgarhī, occupies parts of six Provinces, namely, Oudh, the Province of Agra, Baghelkhand, Bundelkhand, Chota Nagpur, and the Central Provinces. It covers the whole of Oudh except the district of Hardoi and a part of Fyzabad. In the North-Western Provinces it covers, roughly speaking, the country between Benares and Hamirpur in Bundelkhand. It occupies the whole of Baghelkhand, the north-east of Bundelkhand, the south-Sone tract of the district of Mirzapur, the States of Chang Bhakar, Sarguja, Udaipur, Korea, and a portion of Jashpur in Chota Nagpur. In the Central Provinces it covers the districts of Jubbulpore and Mandla, and the greater part of Chhattisgarh with its Feudatory States.

558. As in the case of Bihārī, it was found impossible to enumerate separately the number of speakers of Eastern Hindī residing in the Lower Provinces of Bengal. Out of the 26,780,174 people returned from Bengal as speaking "Hindī," 24,283,028 have been credited to Bihārī, leaving a balance of 2,497,146 unaccounted for, some of whom certainly speak Eastern Hindī, while the rest speak Western Hindī. It is impossible to divide these figures accurately between the two languages. Mr. Gait, however, estimates on very good grounds that we may put the speakers of the former at 1,150,000, leaving a balance of 1,347,146 to be credited to Western Hindī. Adding this 1,150,000 to 20,986,358, the figures given in Table X, Part II, we arrive at 22,136,358 as the approximate number of speakers of Eastern Hindī in all India.

559. The three dialects of Eastern Hindī closely resemble each other. Indeed, Baghēli differs so little from Awadhī, that, were it not popularly recognised as a separate speech, I should be inclined to class it as a form of that dialect. Chhattisgarhī, under the influence of the neighbouring Marāthī and Oriyā, shows greater points of difference; but its close connection with Awadhī is nevertheless apparent. The Awadhī-Baghēli dialect covers the whole of the Eastern Hindī area of the United Provinces and of Bundelkhand, Baghelkhand, Chang Bhakar, and the districts of Jubbulpore and Mandla. It is also spoken by some scattered tribes in the Central Provinces to the south and west. If we wish to make a dividing line between Awadhī and Baghēli, we may take the River Jamna where it runs between Fatehpur and Banda, and thence the southern boundary of the Allahabad district. The boundary must, however, be uncertain, for there is hardly any definite peculiarity which we can seize upon as a decisive test. Chhattisgarhī occupies the remainder of the Eastern Hindī tract; that is to say, the States of Udaipur, Korea, and Sirguja, and a portion of Dialects
Awadhī and Baghēli.
Chhattisgarhī.

Jashpur, and the greater part of Chhattisgarh. As above described, Eastern Hindī occupies an irregular oblong tract of country, extending from, but not including, Nepal to the Bastar State in the Central Provinces, much longer from north to south than it is from east to west. Its mean length may be roughly taken as 750 miles, and its mean breadth as 250, which together give an area of about 187,500 square miles.

A vernacular elsewhere than in the Eastern Hindī tract proper.

560. Owing to the prestige of the Lucknow Court Awadhī is also spoken as a *vernacular* by Muhammadans over the eastern part of the United Provinces and over the greater part of Bihar, the language of the Hindū majority of this tract being Bihārī. It is difficult to say how many of these Musalmāns do use Awadhī, but, so far as my information goes, I can estimate them as numbering about a million.

Speakers abroad

Large numbers of speakers of Eastern Hindī are scattered all over Northern India. Putting to one side the number of Oudh men who have travelled abroad in quest of service, there is our Native Army which is largely recruited in that Province.

Linguistic boundaries

561. Eastern Hindī is bounded on the north by the languages of the Nepal Himalayas and on the west by various dialects of Western Hindī, of which the principal are Kanaujī and Bundēlī. On the east it is bounded by the Bhojpurī dialect of Bihārī and by Oriyā. On the south it meets forms of the Marāthī language.

Position of Eastern Hindī with regard to languages of the Outer and the Inner Groups.

562. It would take up too much space to examine fully the relationship which Eastern Hindī bears to the languages on its east and on its west. In its pronunciation it follows that of the west in the most important particulars, while in the declension of nouns (although it has typical peculiarities of its own) it in the main follows Bihārī. So also in the declension of its pronouns it follows the Eastern languages; for instance, its possessive pronoun of the first person is *mōr*, not *mērā*. In the conjugation of verbs it occupies a true intermediate position. We have seen that the typical characteristic of the Eastern languages is the use of personal terminations in the past tense, of which the base ends in *l*. Eastern Hindī does not use a past participle in *l*, but does employ the same personal terminations as those which are found in Bihārī. For instance, the Western Hindī participle "struck" is *mārā*, which is a contracted form of *māriā*, while the Bihārī form is *mārila*. In the West, "he struck" is *mārā* (i.e., *māriā*), without any termination. In Bihārī it is *mārilas*, with the termination *s*, meaning "he" (or, literally, "by him"). Eastern Hindī takes the Western *māriā*, and adds to it the Bihārī termination *s*, so that it has *māriā-s*, more usually pronounced *māris*. In the future tense it is still more mixed. Its first person commonly follows the Eastern fashion, and the third the Western. The second person wavers between the two. Thus, "I shall strike" is the Eastern *mārabōñ*, while "he will strike" is the Western *mārihē*. We thus see that Eastern Hindī occupies an intermediate position between the Central Languages and those of the East, exactly like the "Half-Māgadhī" from which it is descended.

Awadhī Literature.

563. Two dialects of Eastern Hindī, Awadhī and Baghōlī, have received considerable literary culture. Of these the Awadhī literature is by far the most important. The earliest writer of note in that dialect was a Musalmān, Malik Muhammad of Jāyas (fl. 1540 A.D.), the author of the fine philosophic epic entitled the *Padmāvatī*. This work, while telling in vivid language the story of Ratan Sen's quest for the fair Padmāvatī, of Alāu'ddīn's ruthless siege of the virgin city of Chitor, of Ratan's valour, and of Padmāvatī's wifely devotion, culminating in the terrible sacrifice of all in the doomed city that was true and fair, to save it from the lust of the Tartar conqueror, is also an allegory describing the search of the soul for true wisdom, and the trials and temptations which beset it in its course. Malik Muhammad's ideal of life is high, and throughout the work of the Musalmān ascetic there run veins of the broadest charity and of sympathy with those higher spirits among his Hindū fellow countrymen who were groping in the dark for that light of which many of them obtained glimpses.

Half a century later, contemporary with our Shakespeare, we find the poet and reformer Tulsī Dās. This extraordinary man, who, if we take for our test the influence which he exercises at the present day, was one of the half dozen great writers which Asia has produced, deserves more than a passing notice. He is popularly known as the author of a history of Rāma, but he was far more than

that. He occupies a position amongst the singers of the Rāma legend peculiar to himself. Unlike the religious poets who dwelt in the Dōāb, and whose theme was Krishna, he lived at Benares, unequalled and alone in his niche in the Temple of Fame. Disciples he had in plenty—to day they are numbered by millions—but imitators, none. Looking back through the vista of centuries we see his noble figure standing in its own pure light as the guide and saviour of Hindostan. His influence has never ceased, nay, it has ever kept increasing, and only when we reflect upon the fate of Tantra-ridden Bengal or on the wanton orgies which are carried out under the name of Krishna worship, can we justly appreciate the work of the man who first in Northern India taught the infinite vileness of sin and the infinite graciousness of the Deity, and whose motto might have been—

“He prayeth best who loveth best
All things both great and small.”

But Tulsī Dās not only taught this elevated system of religion;—he succeeded in getting his teaching accepted. He founded no sect, laid down no dogmatic creed, and yet his great work is at the present day the one Bible of ninety millions of people, and fortunate it has been for them that they had this guide. It has been received as the perfect example of the perfect book, and thus its influence has not only been exercised over the unlettered multitude, but over the long series of authors who followed him, and especially over the crowd which sprang into existence with the introduction of printing at the beginning of the last century. As Mr. Growse says, in the introduction to his translation of the *Rāmāyan* of this author, “the book is in everyone’s hands, from the court to the cottage, and is read and heard and appreciated alike by every class of the Hindū community, whether high or low, rich or poor, young or old.” In fact the importance of Tulsī Dās in the history of India cannot be overrated. Putting the literary merits of his work out of the question, the fact of its *universal* acceptance by all classes, from Bhagalpur to the Punjab, and from the Himalaya to the Nerbudda, surely demands more than a polite acknowledgment of his existence. Nearly thirty years ago, an old missionary said to me that no one could hope to understand the natives of Upper India, till he had mastered every line that Tulsī Dās had written. I have since learned to know how right he was. The result of the commanding position which this poet occupies in the literary history of India, is that the Awadhī dialect in which he wrote has since his time been accepted as the only form of North Indian speech in which certain forms of poetry can be composed. For the past three centuries the great mass of Indian poetical literature has been inspired by one or other of two themes, the history of Rāma and the history of Krishna. The scene of the latter’s early exploits was the central Dōāb, with the district of Muttra to its south, and the Braj Bhāshā of that tract has been used as the means of recording it. But all the vast literature dealing with Rāma has been composed in Awadhī. Nay, more, the use of Awadhī has extended, so that, excepting that devoted to the Krishna cycle, nine-tenths of all the poetry of North India has been written in it. Such, for instance, is the great translation of the Mahābhārata made at the commencement of the last century for the Mahārāja of Benares. The list of authors in this dialect is a long one, and their works include many of great merit.

564. The other dialect of Eastern Hindi, Bagheli, has also a considerable literature. Under the enlightened patronage of the Kings of Rewa, a school of poets arose in that country, whose works still enjoy a considerable reputation. These were, however, rather the products of scholars and critics who wrote about poetry than of poets themselves. The critical faculty was finely developed, but the authors were not “makers” in the true sense of the word.

565. We now come to the consideration of the Inner languages which fall into two groups, the Western and the Northern.

Language	Population returning it	Group
Western Hindi .	40,714,925*	The Western Group includes Western Hindi, Rājasthani, Gujarātī, and Panjābī.
Rājasthani .	10,917,712	
Gujarātī .	9,928,501†	
Panjābī .	17,070,961	
TOTAL, Western Group	78,632,099	

566. Western Hindi covers the country between Sirhind [Sahriād] in the Punjab and Allahabad in the United Provinces. On the north it extends to the foot of Himalaya, but on the south it does not

* The figures for Western Hindi are those given in the tables, plus 1,347,146 as explained under the head of Eastern Hindi.

† Including Bhil dialects and Khandesi

reach much beyond the valley of the Jamna, except towards the east, where it covers Bundelkhand and a portion of the Central Provinces. It has several recognised dialects, of which the principal are Hindōstānī, Braj Bhāshā, Kanaujī, and Bundēlī, to which we may add the Bāngarū of the South-Eastern Punjab. Of these, Hindōstānī is now the recognised literary form of Western Hindi, and it will be more convenient to consider it last. The home of Braj Bhāshā is the Central Dōāb and the country immediately to its south from near Delhi to, say, Etawah, its head-quarters being round the town of Muttra.

Braj Bhāshā

Dialect	Estimated population speaking it
Vernacular Hindōstānī	7,072,745
Dakhinī	6,292,628
Other Hindōstānī, including unclassified dialects	5,921,884
Braj Bhāshā	8,380,724
Kanaujī	5,082,006
Bundēlī	5,440,280
Bāngarū	2,505,158
TOTAL, Western Hindi	40,714,925

South and west of the Jumna it is also spoken in Gurgaon, in the States of Bharatpur and Karauli, and in the north-west of the Gwalior Agency. To its west and south it gradually merges into Rājasthānī. For more than two thousand years Muttra has been one of the most important centres of Aryan civilisation. Here also tradition places the scenes of the earlier life of the famous demi-god Krishna. It was thus natural that the dialect of this country, the direct descendant of the old Prakrit of Śūrasēna, should be used for literature. In the Sanskrit dramas, the ordinary conversation in prose of women of the upper classes was couched in Śaurasēnī Prakrit, and a variety of the same dialect

was employed by the Digambara Jains for their sacred books. In ancient times

BRAJ BHĀSHĀ	
Where spoken	Estimated number of speakers
Central India	3,847
Punjab	3,551
Rajputana	1,263,245
United Provinces	7,109,000
Elsewhere	1,081
TOTAL, Braj Bhāshā	8,380,724

a part of Śūrasēna was known as Vraja, i.e., the country of the cow-pens, and from this is derived the modern appellation of Braj, with its language known as Braj Bhāshā. The most important writer in the modern vernacular was the blind bard Sūr Dās, who flourished in the middle of the sixteenth century. As Tulsī Dās sung of Rāma, so Sūr Dās sung of Krishna, and between them, according to native opinion, they have exhausted all the possibilities of poetic art. Many are the traditions of minor poets who were unable to produce a single line which was not to be found already existing in the works of one or other of these two masters of song. To the European mind

there can be little comparison between the two. Sūr Dās was a voluminous author who sung in one key, a sweet one it is true, while Tulsī Dās, besides being a great reformer who rose superior to dogma and creeds and who refused to found a sect, was master of the whole gamut of human passion. Sūr Dās was not only one of the founders of a sect, but was also the creator of a school of poets whose theme was Krishna, and especially the child Krishna, the companion of the herdmaidens of Muttra, which still exists and which expresses itself through the medium of Braj Bhāshā. The most celebrated of his followers was Bihārī Lāl (early part of seventeenth century), the author of the famous Sat-sai.

Kanaujī.

KANAUJĪ	
Where spoken	Estimated number of speakers
United Provinces	5,092,006
Elsewhere	
TOTAL, Kanaujī	5,082,006

567. Kanaujī is the dialect of the Lower Dōāb from about Etawah to near Allahabad. Opposite the town of Kanauj it has also spread across the Ganges into the district of Hardoi and a part of Unao. It is nearly related to Braj Bhāshā, being really little but a sub-dialect of that form of speech. It has received small literary cultivation, being completely overshadowed by its more powerful neighbour, but the Serampur missionaries used it for one of their translations of the New Testament in the early part of the last century. If we may trust the evidence of their translation, the dialect has lost several old historical forms which

existed in Kanaujī in the early part of the nineteenth century, and which are still found in some of the Rājasthānī dialects, and in the Khas of Nepal.

* These figures are to be received with caution. They are all only estimates, which are based on imperfect materials. Details of each estimate are given lower down. The figures for "other Hindōstānī" (which are arrived at by deducting the other figures from the total for Western Hindi) certainly include many speakers of other dialects, even Rājasthānī ones.

568. Bundēli is the dialect of Western Hindi spoken in Bundelkhand and the neighbourhood, including not only the Bundelkhand Agency, but also Jalaun, Hamirpur, and Jhansi, together with the eastern portion of the Gwalior Agency. It is also spoken in the adjoining portions of Bhopal, and in the Damoh, Saugor, Seoni, and Narsinghpur, and parts of the Hoshangabad and Chhindwara districts of the Central Provinces. Banda, though politically in Bundelkhand, does not speak Bundēli. The language here is a mixed one, but it is in the main Baghēli. Bundēli has a small literature, dating from the time of Chhattar Sāl of Panna and his immediate predecessors and successors of the early part of the eighteenth century. The Serampur missionaries translated the New Testament into it.

BUNDĒLI	
Where spoken	Estimated number of speakers
Central India .	2,206,456
Central Provinces	1,803,591
United Provinces	1,450,000
Elsewhere .	233
TOTAL, Bundēli	5,460,280

These three dialects, Braj Bhāshā, Kanauji, and Bundēli, are all closely connected with each other, and are typical pure languages of the Inner group.

569. The Western Hindi spoken in the south-east of the Punjab has several local names, but it is everywhere the same dialect. In the Haryana tract of Hissar and Jind, it is recognised by Europeans under the name of Hariāni. They, however, call the same form of speech, when they meet it in Rohtak, Dujana, the country parts of the Delhi district, and Karnal, simply "Hindi."

BĀNGARŪ	
Where spoken	Number of speakers
Hissar .	401,704
Jind .	200,512
Rohtak .	629,121
Dujana .	21,097
Delhi (about)	400,000
Karnal .	844,562
Rajputana	3,054
Elsewhere	1,808
TOTAL, Bāngarū	2,505,158

Natives sometimes call it Jātū, and sometimes Bāngarū, according to the caste of the people who speak it or to the tract in which it is spoken. Bāngarū, or the language of the Bāngar, the high and dry tract of the South-Eastern Punjab west of the Ganges, appears to be the most suitable name by which to identify it. This form of Western Hindi

has Panjābī to its north and west, and Ahirwātī and Mārwarī (both dialects of Rājasthānī) to its south, and it is a mixture of the three languages, with Western Hindi as its basis. It does not extend further north than Karnal. In the east of the Umbala district the form of Western Hindi which we find spoken is the same as the vernacular Hindōstānī of the Upper Dōāb which will now be described. In West Umbala we find Panjābī.

570. As a vernacular, Hindōstānī is the dialect of Western Hindi which exhibits that language in the act of shading off into Panjābī. It has the Western Hindi grammar, but the terminations are those which we find in Panjābī. Thus, the true Western Hindi postposition of the genitive is *kau*, and the form used in Panjābī is *dā*. The Hindōstānī dialect of Western Hindi takes the *k* of *kau*, but the termination *ā* of the Panjābī, and has *kā*. So also in all adjectives and participles. Hindōstānī must be considered under two aspects, (1) as a vernacular dialect of Western Hindi, and (2) as the well-known literary language of Hindostan and the *lingua franca* current over nearly the whole of India. As a vernacular, it may be taken as the dialect of Western Hindi spoken in the Upper Gangetic Dōāb, in Rohilkhand, and in the east of the Umbala district of the Punjab. It is spoken in its greatest purity round Meerut and to the north. In Rohilkhand it gradually shades off into Kanauji, and in Umbala into Panjābī. In the rest of the Eastern Punjab the language is Bāngarū except in Gurgaon where vernacular Hindōstānī merges into Braj Bhāshā, which may be considered to be established in the east of that district. In the neighbourhood of Meerut, save in a few minor particulars, the language is practically the same as that taught in the usual Hindōstānī grammars.* It is not, however, as the vernacular of the Upper Dōāb that Hindōstānī is generally known. To Europeans it is the polite speech of India generally, and more especially of Hindostan. The name itself is of European coinage, and indicates the idea which is thus connoted, it being rarely

* It will be noticed that this account of Hindōstānī and its origin differs widely from that which has been given hitherto by most authors (including the present writer), which was based on Mir Amman's preface to the "Bāgh o Bahār." According to him Urdu was a mongrel mixture of the languages of the various tribes who flocked to the Delhi Bazaar. The explanation given above was first put forward by Sir Charles Lyall in the year 1880, and the Linguistic Survey has shown the entire correctness of his view. Hindōstānī is simply the vernacular of the Upper Dōāb, on which a certain amount of literary polish has been bestowed, and from which a few rustic idioms have been excluded.

Urdū

used by natives except under European influence. As a *lingua franca* Hindōstānī grew up in the bazaar attached to the Delhi Court, and was carried everywhere in India by the lieutenants of the Moghul Empire. Since then its seat has been secure. It has several recognised varieties, amongst which may be mentioned Urdū, Rēkhta, Dakhinī, and Hindī. Urdū is that form of Hindōstānī which is written in the Persian character, and which makes a free use of Persian (including Arabic) words in its vocabulary. The name is said to be derived from the *Urdū-e mu'alla* or royal military bazaar outside the Delhi palace. It is spoken chiefly in the towns of Western Hindostan and by Musalmāns and Hindūs who have fallen under the influence of Persian culture. Persian vocabularies are, it is true, employed in every form of Hindōstānī. Such have been admitted to full citizenship even in the rustic dialects, or in the elegant Hindī of modern writers like Harishchandra of Benares. To object to their use would be affected purism, just as would be the avoidance of the use of all words of Latin derivation in English. But in what is known as high Urdū, the use of Persian words is carried to almost incredible extremes. In writings of this class we find whole sentences in which the only Indian thing is the grammar, and with nothing but Persian words from beginning to end. It is curious, however, that this extreme Persianisation of Hindōstānī is not, as Sir Charles Lyall rightly points out, the work of conquerors ignorant of the tongue of the people. On the contrary, the Urdū language took its rise in the efforts of the ever pliable Hindū to assimilate the language of his rulers. Its authors were Kāyasths and Khatrijs employed in the administration and acquainted with Persian, not Persians or Persianised Turks, who for many centuries used only their own language for literary purposes.* To these is due the idea of employing the Persian character for their vernacular speech, and the consequent preference for words to which that character is native. "Persian is now no foreign idiom in India, and though its excessive use is repugnant to good taste, it would be a foolish purism and a political mistake to attempt (as some have attempted) to eliminate it from the Hindū literature of the day." I have made this quotation from Sir Charles Lyall's work, in order to show what an accomplished scholar has to say on one side of a much debated question. That the general principle which he has enunciated is the correct one I think no one will dispute. Once a word has become domesticated in Hindōstānī no one has any right to object to its use, whatever its origin may be, and opinions will only differ as to what words have received the right of citizenship and what have not. This, after all, is a question of style, and in Hindōstānī as in English, there are styles and styles. For myself, I far prefer the Hindōstānī from which words whose citizenship is in any way doubtful are excluded, but that, I freely admit, is a matter of taste.

Rēkhta

571. Rēkhta (*i.e.*, "scattered" or "crumbled") is the form which Urdū takes when used for poetry. The name is derived from the manner in which Persian words are "scattered" through it. When poems are written in the special dialect used by women, which has a vocabulary of its own, it is known as Rēkhti.†

Dakhinī.

DAKHINI	
Where spoken	Estimated number of speakers
Ajmer	58
Baroda	69,048
Barr	270,003
Bombay	1,125,048
Central Provinces	2,516,757
Cochin	2,467
Coorg	6,679
Hyderabad	1,158,490
Madras	892,480
Mysore	245,516
Punjab	136
Travancore	5,956
TOTAL Dakhini	6,292,628

572. Dakhinī is the form of Hindōstānī used by Musalmāns in the Deccan. Like Urdū it is written in the Persian character, but is much more free from Persianisation. It uses grammatical forms (such as *mērē kō* for *mujh kō*) which are common in rustic parts of Northern India, but which are not found in the literary dialect, and in some localities,‡ does not use the agent case with *ne* before transitive verbs in the past tense, which is a characteristic feature of all the dialects of Western Hindostan. In the figures given in the margin, I have deducted the speakers of Hindōstānī who are found in Gujarat, from the total of the Bombay Presidency. The Hindōstānī of Gujarat has very

* English is being introduced into Indian vernaculars in the same way. Once in Monghyr I overheard one Punjabi say to another "ē dēśēr climate constitutionēr janya atī healthy." A native horse doctor once said to me about a dog licking his wound, "Kutta-kā saliva bahut antiseptic hai," and Mr Grahame Bayley has heard one Punjabi dentist say to another "continually excavate na karo."

† It is hardly necessary to point out that much of the preceding account of Urdū is based on Sir Charles Lyall's *Sketch of the Hindustani language*.

‡ As a broad rule Bombay Dakhinī and all that spoken north of the Satpuras employ *nē*, while Madras Dakhinī does not.

few of the typical characteristics of Dakhinī, and more nearly approaches the standard of Delhi.

573. The word "Hindī" is used in several different meanings. It is a Persian, ^{Hindī} not an Indian, word, and properly signifies a native of India, as distinguished from a "Hindū" or non-Musalmān Indian. Thus Amir Khusrau says "whatever live Hindū fell into the King's hands was pounded to death under the feet of elephants. The Musalmāns who were Hindīs had their lives spared." In this sense (and in this way it is still used by natives) Bengali and Marāthī are as much Hindī as the language of the Dōāb. On the other hand, Europeans use the word in two mutually contradictory senses, *viz.*, sometimes to indicate the Sanskritised, or at least the non-Persianised, form of Hindōstānī which is used as a literary form of speech by Hindūs, and which is usually written in the Dēvanāgarī character, and sometimes, loosely, to indicate all the rural dialects spoken between Bengal Proper and the Punjab. It is in the latter sense that the word was employed at the last Census, but, in the present pages, I use it only in the former. This Hindī, therefore, or, as it is sometimes called, "High Hindī," is the prose literary language of those Hindūs who do not employ Urdū. It is of modern origin, having been introduced under English influence at the commencement of the last century. Up till then, when a Hindū wrote prose and did not use Urdū, he wrote in his own local dialect, Awadhī, Bundelī, Braj Bhāshā, or what not. Lallū Lāl, under the inspiration of Dr. Gilchrist, changed all this by writing the well-known Prēm Sāgar, a work which was, so far as the prose portions went, practically written in Urdū, with Indo-Aryan words substituted wherever a writer in that form of speech would use Persian ones. It was thus an automatic reversion to the actual vernacular of the Upper Dōāb. The course of this novel experiment was successful from the start. The subject of the first book written in it attracted the attention of all good Hindūs, and the author's style, musical and rhythmical as the Arabic *saj'*, pleased their ears. Then, the language fulfilled a want. It gave a *lingua franca* to the Hindūs. It enabled men of widely different provinces to converse with each other without having recourse to the, to them, unclean words of the Musalmāns. It was easily intelligible everywhere, for its grammar was that of the language which every Hindū had to use in his business relations with Government officials, and its vocabulary was the common property of all the Sanskritic languages of Northern India. Moreover, very little prose, excepting commentaries and the like, had been written in any modern Indian vernacular before. Literature had almost entirely confined itself to verse. Hence the language of the Prēm Sāgar became, naturally enough, the standard of Hindū prose all over Hindostan, from Bengal to the Punjab, and has held its place as such to the present day. Now-a-days no Hindū of Upper India dreams of writing in any language but Urdū or Hindī when he is writing prose; but when he takes to verse, he at once adopts one of the old national dialects, such as the Awadhī of Tulsī Dās or the Braj Bhāshā of the blind bard of Agra. Some adventurous spirits have tried to write poems in Hindī, but the attempts have been disastrous, and have earned nothing but derision. Since Lallū Lāl's time Hindī has developed for itself certain rules of style which differentiate it from Urdū, the principal ones relating to the order of words, which is much less free than in that form of Hindōstānī. It has also, of late years, fallen under the fatal spell of Sanskrit, and is showing signs of becoming, in the hands of Pandits, and under the encouragement of some European writers who have learned Hindī through Sanskrit, as debased as literary Bengali, without the same excuse. Hindī has so copious a vocabulary of its own, a vocabulary rooted in the very beings of the sturdy peasantry upon whose language it is based, that nine-tenths of the Sanskrit words which one meets in most modern Hindī books are useless and unintelligible excrescences. The employment of Sanskrit words is supposed to add dignity to the style. One might as well say that a graceful girl of eighteen gained in dignity by masquerading in the furbelows of her great grandmother. Some enlightened native scholars are struggling hard, without displaying any affected purism, against this too-easily acquired infection, and we may hope that their efforts will meet with the encouragement which they deserve.

574. We may now define the three main varieties of Hindōstānī as follows. — <sup>Hindōstānī,
Urdū, and
Hindī.</sup> Hindōstānī is primarily the language of the Northern Dōāb, and is also the *lingua franca* of India, capable of being written in both Persian and

Dēva-nāgarī characters, and, without purism, avoiding alike the excessive use of either Persian or Sanskrit words when employed for literature. The name "Urdū" can then be confined to that special variety of Hindōstānī in which Persian words are of frequent occurrence, and which hence can only be written in the Persian character; and, similarly, "Hindī" can be confined to the form of Hindōstānī in which Sanskrit words abound, and which hence can only be written in the Dēva-nāgarī character. These are the definitions which were proposed by the late Mr. Growse, and they have the advantage of being intelligible, while at the same time they do not overlap. Hitherto, all the three words have been very loosely employed. Finally, I use "Eastern Hindī" to connote the group of intermediate dialects of which Awadhī is the chief, and "Western Hindī" to connote the group of dialects of which Braj Bhāshā and Hindōstānī (in its different phases) are the best known.

Literature

575 As a literary language, the earliest specimens of Hindōstānī are in Urdū, or rather Rēkhta, for they were poetical works. Its cultivation began in the Deccan at the end of the sixteenth century, and it received a definite standard of form a hundred years later, principally at the hand of Walī of Aurangabad, commonly called "the Father of Rēkhta." The example of Walī was quickly followed at Delhi, where a school of poets took its rise of which the most brilliant members were Saudā (d. 1780, the author of the famous satires) and Mir Taqī (d. 1810). Another school (almost equally celebrated) arose in Lucknow during the troubled time at Delhi in the middle of the eighteenth century. The great difference between the poetry of Urdū and that written in the various dialects of Eastern or Western Hindī lies in the system of prosody. In the former the prosody is that of the Persian language, while in the latter it is the altogether opposed indigenous system of India. Moreover, the former is entirely based on Persian models of composition, which are quite different from the older works from which the native literature took its origin. Urdū prose came into existence, as a literary medium, at the beginning of the last century in Calcutta. Like Hindī prose, it was due to English influence, and to the need of text-books in both forms of Hindōstānī for the College of Fort William. The Bāgh o Bahār of Mir Amman, and the Khirad Afrōz of Hafīzu'ddīn Ahmad are familiar examples of the earlier of these works in Urdū, as the already mentioned Prēm Sāgar written by Iallū Lāl is an example of those in Hindī. Since then both Urdū and Hindī prose have had a prosperous course, and it is unnecessary to dwell upon the copious literature which has poured from the press during the past century. Muhammad Husain (Āzād) and Pandit Ratan Nāth (Sarshār) are probably the most eminent among the writers of Urdū prose, while in Hindī the late Harishchandra of Benares, by universal consent, holds the first place. Hindī, of course, has no poetical literature. Urdū poetry continues to flourish, one of the most distinguished authors of the last century being the late King of Oudh.

Rājasthānī

576 As its name indicates, Rājasthānī is the language of Rājasthān, in the sense given to that word by Tod. It is spoken in Rajputānā and the western portion of Central India, and also in the neighbouring parts of the Central Provinces, Sind, and the Punjab. To the east it shades off into Bundēlī in the Gwalior Agency. To its north it merges into Braj Bhāshā, in the States of Kerauli and Bharatpur and in the British district of Gurgaon. To the west it gradually becomes Panjābī, Lahndā, and Sindhī, through the mixed dialects of the Indian Desert, and, directly, Gujarātī in the State of Palanpur. On the south it meets Marāthī, but does not merge into it.

Dialects.

577. Rājasthān is a tract divided amongst many states and many tribes, and

Dialect	Number of speakers reported
Mēwātī . . .	592,198
Mālvi . . .	1,742,065
Nīmārī . . .	216,110
Jaipuri . . .	2,166,771
Mārwarī . . .	4,781,891
Bāgrī . . .	845,743
Gujarī . . .	204,322
Unspecified	368,212
TOTAL Rājasthānī	10,917,712

it has hence many closely related dialects. No less than fifteen variations of the local speech have been counted in the Jaipur State alone. Omitting minor local differences, there are at least sixteen real dialects spoken over the area in which Rājasthānī is the vernacular. An examination of them shows that they fall into four main groups, which may be called Mēwātī, Mālvi, Jaipuri, and Mārwarī, and these may be taken as the four main dialects of the language. In addition to these we may also notice Bāgrī, Nīmārī, and Gujarī. The

first is a form of Mārwarī, and the second of Mālvi, while the third is most nearly related to Jaipuri.

Māwārī	
Where spoken.	Number of speakers
Rajputana . . .	478,756
Punjab . . .	110,409
Central India . . .	8,147
Elsewhere . . .	186
TOTAL, Māwārī . . .	592,498

579. The head-quarters of Mālvi are in the Malwa country round Indore, but Mālvi.

Mālvi	
Where spoken	Number of speakers.
Central India . . .	1,524,663
Central Provinces . . .	52,797
Rajputana . . .	161,056
Elsewhere . . .	3,543
TOTAL, Mālvi . . .	1,742,065

Nīmārī	
Where spoken	Number of speakers.
Central India . . .	177,945
Central Provinces . . .	38,165
TOTAL, Nīmārī . . .	216,110

580. Jaipuri may be taken as representing the dialects of Eastern Rajputana, Jaipuri.

JAIPURI.	
Where spoken	Number of speakers
Ajmer-Merwara . . .	5,938
Central India . . .	41,642
Rajputana . . .	2,118,767
Elsewhere . . .	424
TOTAL, Jaipuri . . .	2,166,771

581. By far the most important of the Rajputana dialects, whether we consider Mārwarī.

Māwārī	
Where spoken.	Number of speakers
Ajmer-Merwara . . .	888,401
Assam . . .	7,205
Bengal . . .	10,663
Berar . . .	41,521
Bombay . . .	253,503
Central India . . .	125,498
Central Provinces . . .	30,941
Hyderabad . . .	57,777
Punjab (excluding Bāgrī) . . .	196,026
Rajputana (excluding Bāgrī) . . .	3,712,262
United Provinces . . .	8,050
Elsewhere . . .	5,144
TOTAL, Māwārī (excluding Bāgrī) . . .	4,781,991
Bāgrī	
Punjab . . .	281,491
Rajputana . . .	564,252
TOTAL, Bāgrī . . .	845,743
TOTAL, Māwārī (including Bāgrī) . . .	5,627,734

578. Mēwātī or Bighōtā is the dialect of the Mēwātī north-east of Rajputana. It is the language of the Mēos, whose head-quarters are in the State of Alwar. It is also spoken in the South-East Punjab, and the native states adjoining. The Ahirwātī spoken to the south and south-west of Delhi is a form of it. As might be expected, it is the dialect of Rājasthānī which most nearly approaches Western Hindī. In Ahirwātī we see it merging into Bāngarū, while in the dialect of Alwar, it is shading off into Braj Bhāshā.

It extends over a wide tract. To the east it reaches Bhopal, where it meets Bundēli, and to the west it is stopped by the Bhil dialects spoken in the hills south of Udaipur. It also occupies the north-western districts of the Central Provinces. A peculiar form of it, which is much mixed with Mārwarī forms, is called Rāngri, and is spoken by Rajputs. In North Nimar and the adjoining portion of the Bhopawar Agency of Central India, Mālvi has become so mixed with Khandēsī and the Bhil languages that it has become a new dialect, called Nīmārī, and possessing peculiarities of its own Nīmārī can, however, hardly be called a true dialect, in the sense in which we call Mēwātī, Mālvi, Jaipuri, and Mārwarī dialects of Rājasthānī. It is rather a mixed patois made up of several languages, with Mālvi for its basis.

of which it and Hārautī are the chief. It goes as far east as Gwalior, in which Agency Bundēli is the principal form of speech. We know more about Jaipuri than about any other form of Rājasthānī. At the request of His Highness the Maharajah of Jaipur, an elaborate survey of all the various local dialects employed in the State has been carried out by the Rev. G. Macalister, M.A., who has published the results in an admirable little volume.

the size of the area in which it is the vernacular, the number of its speakers, or the extent to which it has spread over India, is Mārwarī. Its home is Western Rajputana, including the great States of Marwar, Mewar, Bikaner, and Jaisalmir. It has many varieties, of which the best known are the Thālī, or Western Mārwarī of the Desert, which extends well into Sind, the Mēwārī of the Udaipur State, and the Bāgrī of North-East Bikaner and the neighbouring portion of the Punjab. The last is often considered a distinct dialect. The Shekhāwātī of North-West Jaipur differs very little from the Mārwarī spoken in the east and centre of the adjoining State of Bikaner. In most parts of India Mārwarī is taken by natives to include all the various dialects of Rajputana, so that the figures given inevitably include some speakers of Jaipuri and Mālvi. In the previous Census Mārwarī was classed as a separate language, and all the remaining dialects of Rājasthānī, together with Western Hindī, Eastern Hindī, and Bihārī, were

put together under one head, that of "Hindī." That all the four Rājasthānī dialects form one closely connected group, distinct from Western Hindī, cannot be doubted; indeed, they are much more closely connected with Gujarātī than with that language. The historical relationship that has existed for centuries between Rajputana and Gujarat is a matter of common knowledge.

Literature.

582 The only dialect of Rājasthānī which has a considerable recognised literature is Mārwarī. Numbers of poems in Old Mārwarī or Dingal, as it is called when used for poetical purposes, are in existence but have not as yet been seriously studied. Besides this, there is an enormous mass of literature in various forms of Rājasthānī, of considerable historical importance, about which hardly anything is known. I allude to the corpus of bardic histories described in Tod's *Rajasthan*, the accomplished author of which was probably the only European who has read any considerable portion of them. A small fraction of the most celebrated history, the *Prithirāj Rāsau* of Chand Bardāi, has, it is true, been edited and translated, but the rest, written in an obsolete form of a language little known at the present day, still remains a virgin mine for the student of history and of language. The task of producing the whole is, however, too gigantic for any single hand, and unless it is taken up by some body of scholars acting on a uniform plan, I fear that the only students of Rajputana history for many years to come will be fish-insects and white ants. What an opportunity of laying his fellow countrymen under everlasting obligations lies open to some patriotic Rajput prince! Besides these Bardic Chronicles, Rājasthānī also possesses a large religious literature. That of the Dādū Panthī sect alone contains more than half a million verses. We do not know in what dialect of Rājasthānī any of these works are written. The portion of the *Prithirāj Rāsau* which has been published is written in an old form of Western Hindī—not Rājasthānī,—but, unfortunately, this work, while the most celebrated, is also the one regarding the authenticity of which the most serious doubts are justified. The Serampur missionaries translated the New Testament into Harautī (an eastern dialect), Ujainī (*i.e.*, Mālvi), Udaipuri (*i.e.*, Mēwārī), Mārwarī, Jaipurī proper, and Bikanēri.

Characteristics of the language

583. At the time of the great war of the Mahābhārata, the country known as that of the Panchālas extended from the river Chambal up to Hardwār at the foot of the Himalayas. The southern portion of it, therefore, coincided with Northern Rajputana. We have already seen that the Panchālas represented one of the Aryan tribes who were the first to enter India, and that, therefore, it is probable that their language was one of those which belonged to the Outer Circle of Indo-Aryan Sanskritic languages. If this is the case, it is, *a fortiori*, also true of the rest of Rajputana more to the south. The theory also further requires us to conclude that as the Aryans who spoke the Inner Group of languages expanded and became more powerful, they gradually thrust those of the Outer Circle, who were to their south, still further and further in that direction. In Gujarat, the Inner Aryans broke through the retaining wall of the Outer tribes and reached the sea. There are traditions of several settlements from the Madhyadēśa in Gujarat, the first-mentioned being that of Dwārakā in the time of the Mahābhārata war. The only way into Gujarat from the Madhyadēśa is through Rajputana. The more direct route is barred by the great Indian Desert. Rajputana itself was also occupied in comparatively modern times by invaders from Central Hindostan. The Rathours abandoned Kanauj in the Dōāb late in the twelfth century A.D., and took possession of Marwar. The Kachhwāhās of Jaipur claim to have come from Oudh, and the Solankis from the Eastern Punjab. Gujarat itself was occupied by the Yādavas, members of which tribe still occupy their original seat near Muttra. The Gahlōts of Mewar, on the other hand, are, according to tradition, a reflex wave from Gujarat, driven into the neighbourhood of Chitor after the famous sack of Vallabhi. We thus see that the whole of the country between the Gangetic Dōāb and the sea-coast of Gujarat is at present occupied by immigrant Aryan tribes who found there other Aryan tribes previously settled, who belonged to what I call the Outer Circle, and whom they either absorbed or drove further to the south, or both. This is exactly borne out by the linguistic conditions of this tract. Rājasthānī and Gujarātī are languages of the Inner Group, but they show many traces of forms which are characteristic of languages of the Outer Circle. A few may

be mentioned here. In pronunciation Gujarātī, like Sindhī, Marāthī, and Assamese, prefers the sound of *ō* to that of *au*. Thus, the Hindōstānī *chauthā*, fourth, is *chōthō* in Sindhī, Rājasthānī, and Gujarātī. Again, like Sindhī, both Gujarātī and Rājasthānī have a strong preference for cerebral sounds instead of dentals. Like Sindhī and other north-western languages, vulgar Gujarātī pronounces *s* as *h*. So also do the speakers of certain parts of Rajputana. Like all the eastern languages, and Marāthī, but unlike the Inner languages, both Gujarātī and Rājasthānī nouns have an oblique form ending in *ā*. Finally, in the conjugation of verbs, both Gujarātī and Rājasthānī, like Lahndā, have a future whose characteristic is the letter *s*.* We thus see that in several typical features both Rājasthānī and Gujarātī show signs of the influence of languages of the Outer Circle.

584. Rājasthānī uses the Dēva-nāgarī character for its literature. For ordinary purposes it has a corrupt form of that script, popularly known as Mahājani, which is well-nigh illegible to everyone except its writer. It omits nearly all the vowels, and the stories about the consequent misreadings are amongst the popular chestnuts of Indian folklore. Written character

585. Rājasthānī, in the form of Mārwarī, can be heard all over India. There is hardly a town where the "thrifty denizen of the sands of Western and Northern Rajputana has not found his way to fortune, from the petty grocer's shop in a Deccan village to the most extensive banking and broking connection in the commercial capitals of both East and West India." Rājasthānī in other parts of India

586. Before finally leaving the consideration of Rājasthānī, it is necessary to mention the interesting tribe of Gurjjaras, or Gūjars, who appear to have entered India from the north-west in about the fifth century A.D. There are two The Gūjars

GUJARATI	
Where spoken.	Number of speakers*.
Central Provinces	1,272
Kashmir	126,819
Punjab	76,168
Elsewhere	33
TOTAL Gujarati	204,322

branches of them, a northern and a southern. The Southern Gūjars occupied Gujarat, and gave their name to that country. The Northern spread over the Punjab (where they gave their name to two districts) and the western part of the United Provinces. They are a nomadic tribe, and numbers of the Northern branch wander over the mountains north of the Punjab, as far, at least, as Kashmir. The Gūjars of the Punjab proper speak the languages of the people amongst whom they live, but those of the Himālaya have a tongue of their own, which in its grammar is indistinguish-

able from that of the language of Jaipur. Whether they got their language from the Western Pahārī tribes, to be dealt with under the northern group of languages, and whose speech is closely related to Rājasthānī, or whether the Jaipuris got their language from the Gūjars of Gujarat, I am not yet in a position to say, as the Linguistic Survey has not yet reached these parts of India; but it is a curious and noteworthy fact that we find in the mountains of Kashmir a dialect of a language spoken so many hundred miles to their south-east.

587. Here, also, may be briefly mentioned one of the languages classed as Labhānī Gipsy dialects,—Labhānī.

Although not here classed as dialects of Rājasthānī, they are certainly connected with that language. The Linguistic Survey has not yet reached them, and hence I do not alter the arrangement under which they have been provisionally put under the other head. Labhānī, which also passes under various names, such as Labānī, Lamānī, or Banjārī, is the language of the Labhānās or Banjārās, the great carrying tribe of Southern and Western India. They are found as far north as the Punjab, and, so far as the enquiries of the Linguistic Survey have yet gone, their tribal tongue seems to be based on Western Rājasthānī. Banjārās are found as far east as Bihar, but in this region they have no language of their own, though some of the most popular Bhojpuri poems deal with their adventures.

LABHANI	
Where spoken	Number of speakers
Berar	56,254
Bombay	20,839
Central Provinces	23,654
Madras	34,452
Punjab	2,165
Central India	8,004
Hyderabad	92,209
Mysore	35,301
Rajputana	1,523
Elsewhere	35
TOTAL, Labhāni	274,436

* It is probable that this particular *s* future had its origin in the Inner Group, but its retention, where it has been lost by other Inner languages, can be best explained by the influence of the Outer Circle.

Gujarātī	588. Gujarātī is the language spoken in Gujarat, Baroda, and the neighbouring Native States. It extends south along the coast to about Daman, where there is a mixed population, some speaking Marāthī and some Gujarātī. The two languages have no intermediate dialect. On the north, it shades off into Sindhi, through Kachchhī. This last is provisionally classed as a dialect of Gujarātī, but it will probably have to be put down as a form of Sindhi when the Linguistic Survey reaches this part of India. Gujarātī has no other recognised dialects, although, as usual, the speech varies slightly according to locality. It would be possible, however, to distinguish the language of Northern Gujarat from that of the south. Besides being the vernacular of that country, Gujarātī is also the chief commercial language of Western India, and, as such, it acquires modifications according to the class which uses it. We have a Musalmān dialect and a Parsi dialect recognised as well as the standard, in which the differences are principally those of vocabulary. In Southern India there is a colony of silk-weavers which many hundred years ago emigrated from Gujarat, and some of them still speak their ancestral language in a dialect known from the caste of those who employ it as Patnūli.	
	KACHCHHĪ	
	Where spoken.	Number of speakers
Kachchhī.	Baroda	10,880
	Bombay	475,758
	Elsewhere	1,938
Other dialects	TOTAL, Kachchhī .	488,576

	PATNŪLĪ	
	Where spoken	Number of speakers
Patnūli	Bombay . .	627
	Madras . .	85,574
	Elsewhere .	61
	TOTAL, Patnūli	86,262

Bhili and Khandēsi.	589. Under the head of Gujarātī we must include two groups of dialects which were treated differently in the Census of 1891. I allude to the Bhil dialects, and Khandēsi or Ahirānī. In 1891 the former were treated apart, as a branch of the Mundā family, and the latter as a dialect of Marāthī. The Linguistic Survey of India now shows that Bhili and Khandēsi together form one group of dialects, all based on Gujarātī, but intermediate between it and Rājasthānī, forming, in fact, a connecting link between the two languages. The Bhil dialects are spoken in the range of hills between Ajmer and Mount Abu. Thence they cover the hill country dividing Gujarat from Rajputana and Central India, as far south as the Satpura range. On the way, they cross the valley of the Nerbudda up which they extend for a considerable distance. South of the Satpuras lie the district of Khandesh and the Burhanpur Tahsil of Nimar, the latter forming a continuation of the Khandesh plain. Here Khandēsi is spoken, and still further south, in the hill country leading up from Surat to Nasik, are found a number of wild tribes, such as Naikis, Dhōdiās, Gāmtis, and Chōdhris, who employ dialects closely connected with it. The Bhil dialects appear under many names (over thirty have been recorded), but they are all, with Khandēsi and its connected dialects, essentially the same form of speech, which may be described as an Eastern Gujarātī. As we go south, they borrow, it is true, more and more from the neighbouring, dominant, Marāthī, but this is borrowing only. It does not affect the structure of the language, any more than the borrowing of Arabic or Persian words affects the structure of Hindōstānī. We meet tribes speaking Bhil languages in a locality where we might little expect them. In Orissa and the Bengal district of Midnapore, more than a thousand miles distant from the true home of the race, the Linguistic Survey has discovered a wandering tribe, known as Siyāl-girs, who speak a distinctively Bhil language. They perhaps left their own country for their country's good, for they are described as a tribe of thieving propensities, who came to Bengal some five or six generations ago, probably as jetsam from the tide of Marāthā invasion. The Bāwariyās, a wild hunting tribe found in the Punjab, moreover, speak a form of Bhili which is known as Bāori. This has been included in the Tables under Gipsy Languages, and it is now too late to alter the classification. The number of speakers is recorded as 4,952.	
	Bhil dialects	759,928
	Khandēsi	2,742

Siyāl-giri.

Bāori.

The Bhils are usually classed as a Mundā race, and hence their language has hitherto been classed as belonging to that sub-family. It is not improbable that they did once long ago speak a Mundā language, for their vocabulary

has a very small residuum (about six per cent) of words which cannot be identified as Aryan. I sent some of these to authorities on Mundā languages in Chota Nagpur and about half of them were identified as Mundā words. Thus, however, in no way militates against the general fact that their language is now thoroughly Aryan in all essential particulars.

590 We are fortunate in possessing a remarkable series of documents connecting the modern Gujarātī with the Apabhramśa from which it is descended. The grammarian Hēma-chandra, whose work is at the present day our great authority on the various Prakrits, adorns the chapter dealing with Apabhramśa with numerous quotations from poems in that language. These examples vary in age, and some of them are hardly different from old Gujarātī. In dealing with Rājasthānī, we have seen how intimately connected that language is with the one now under consideration, and how it is really a language of the Inner Group, which has superseded one of the Outer Circle, some of whose peculiarities it has borrowed. We know very little about what that former language was. It is probable that it was intermediate between Sindhī and Marāthī, the contiguous languages of the Outer Circle. But Gujarat has been so overrun from the earliest times by nations hailing from many different parts of the world, that there is little hope of our ever being able to resuscitate any fragments of it with certainty. The present Gujarat people is a wonderfully composite one. Greeks, Bactrians, Huns, and Scythians, Gurjjaras, Jadejas, and Kathis, Parsis and Arabs, not to speak of soldiers of fortune from the countries of the west, have all contributed, together with the numerous Indo-Aryan immigrations, to form the population. In such a mixture it is wonderful that even the traces of the old Outer language which we have been able to identify have survived.

591 Gujarātī has not a large literature, but it is larger than it has been sometimes credited with. The earliest, and at the same time the most famous, poet whose works have come down to us in a connected form was Narsingh Mehta, who lived in the fifteenth century A.D. There is also a considerable series of bardic chronicles similar to those which we have met with in Rajputana, on which is based Forbes' well-known *Rās-mālā*. Then, again, there is a fairly long list of poets and poetesses, and of writers on grammar and on rhetoric. Since the introduction of printing, a copious flood of literature has issued from the presses.

592. The Dēva-nāgarī character was formerly used in Gujarat for writing books. Carey's translation of the New Testament, published at the commencement of the last century, was printed in that alphabet. For less important documents, that modification of the Dēva-nāgarī character known in Upper India as the Kaithī, and very generally used there for similar purposes, was also employed. This is now the official character of Gujarātī, as it is of Bihārī, and all books and papers in the language are printed in it.

593. In dealing with Lahndā, I have incidentally pointed out that, like Rājasthānī and Gujarātī, Panjābī is not a pure Central language. As we go westwards it becomes more and more infected with features characteristic of the Outer Circle, and merges so gradually into Lahndā that it is impossible to say where one begins and the other ends. The lines of approximate demarcation between the two will be found in the paragraphs dealing with the latter language. The line between Western Hindī and Panjābī is more distinct, and may be taken as the meridian passing through Sirhind [Sahrind].

594. The mixed character of the languages of the Central and Western Punjab (Panjābī and Lahndā), is well illustrated by the character given to the inhabitants of those tracts in the Mahābhārata, and by incidental references in the grammar of Pāṇini. Although not distant from the holy Sarasvatī, the centre from which Sanskrit civilisation spread, we learn that the laws and customs of the Punjab were at a very early period widely different from those of the Madhyadēśa. The people are at one time described as living in a state of kingless anarchy, and at another time as possessing no Brāhmins (a dreadful thing to an orthodox Hindū of the middle country), living in petty villages, and governed by princes who supported themselves by internecine war. Not only were there no Brāhmins, but there were no castes. The population had no respect for the Vēda, and offered no sacrifices to the gods. They were rude and uncultivated, given to drinking spirituous liquor, and eating all kinds of flesh. Their women were large-bodied, yellow, extremely immoral in their behaviour, and seem to have lived in a state of polyandry, a man's heir being not his son, but the son of his sisters.* That this account was universally true in every particular

* Can the author of this description have had the customs of the Jats in his mind when writing?

need not be urged. It is given to us by enemies; but, whether true or not, it illustrates the gulf in habits, customs, and language, which existed between the Madhyadēśa and the Punjab.

595. Panjābī, as spoken in the plains of the Punjab, may be divided into two well-marked dialects—the Standard, spoken round Amritsar, and known as the Panjābī of the Mānjh or Central part of the Bari Dōāb, and Mālwaī, of the ancient Cis-Sutlej Mālava country (distinct from the Mālwa of Central India), of the South-East. The principal difference

Dialects
Standard of
the Mānjh.

Malwaī

MĀLWAĪ

||

Where spoken

Number of
speakers

||

Dogri.

Punjab

74,170

Written
character.

Dōgri

Literature

Where spoken

Number of
speakers

Jammu and Kashmir
Punjab
Elsewhere *

436,211
22,510
26

TOTAL, Dōgri

458,747

between the two is the preference which Mālwaī shows for pronominal suffixes. As spoken in the Eastern Punjab, Panjābī is sometimes known as Pōwādī. To the south, Panjābī fades off into the Bāgrī form of Mārwaī. Another and more distinct dialect than Mālwaī is the Dōgri spoken in Jammu, which has a written character of its own, allied to that employed for Kāshmīrī. Panjābī uses the form of script entitled the Gurmukhī, which is also connected with the Śāradā of Kashmir. Panjābī has hardly any early literature. Even the Sikh Granth is mainly composed in various languages spoken outside the Punjab, principally Western Hindī. Of late years a small literature has sprung up together with the introduction of the art of printing. The Serampur missionaries translated the New Testament and portions of the old into Standard Panjābī, and the New Testament alone

into Bhatnōrī (a mixed dialect spoken on the border of Bikaner)

Panjabi
abroad

596. Panjābī is the vernacular of our Sikh soldiers, and is hence not only found in many parts of India, but is even heard in distant China, where Sikh police are employed in the Treaty Ports.

Northern
Group

597. The languages of the Northern Group have not yet been satisfactorily investigated. Pending further enquiry, I follow the last Census report in

Language

Population
returning it

Western Pahārī
Central Pahārī
Eastern Pahārī

1,710,029
1,270,931
143,731

TOTAL,
Group

Northern

3,124,681

dividing them, on purely geographical principles, into Western Pahārī, Central Pahārī, and Eastern Pahārī. They are all spoken in the Lower Himalayas, and most of those who employ them are known as Khasās, the descendants of the ancient Khasa tribe, the *κασιοι* of Greek geographers. Who the Khasās were, and where they came from, are subjects which have been often discussed, and it would be unprofitable in the present state of our knowledge of their languages to devote any space to them here. It is sufficient to note that, wherever

else they are found in North-Western India, they have certainly occupied the Lower Himalayas from the Jhelum to Nepal for many centuries. They were a thorn in the side of the rulers of Kashmir, and at the present day one of the names by which Eastern Pahārī (i.e., Nāpālī) is known is Khas. For further particulars the reader is referred to the late Mr Atkinson's admirable monograph in Chapter IV of Part II of the Gazetteer of the Himalayan districts of the United Provinces. As regards the speech used by them at the present day, it consists of a number of dialects, all nearly related to each other. They have one remarkable point in common,—a very close connection with the Rājasthānī, and more especially with the eastern dialects of that language. This is almost certainly due to the historical fact that numbers of Rajputs emigrated to the Lower Himalayas at various times during the early troubles with the Muhammadans, and there intermarried with the Khasās, and conferred upon the descendants of these mixed unions a spurious, but now fully recognised, Kshattriyahood. These descendants would naturally speak the language of their high-caste fathers, and, being the ruling class, would equally naturally impose it upon their subjects. Whether Gujarī falls under this classification, or has an independent connection with Rājasthānī, I am not at present able to say. I have already dealt with it as a dialect of that language.

Western
Pahārī

598. Under the term of "Western Pahārī" is included the maze of Sanskritic languages spoken in the hill country from Bhadarwāh and Chamba on the north-west to Simaur on the south-east. Over thirty distinct dialects have been counted in this tract, of which Bhadarwāhī, Pāngwāhī (spoken in the north of the

Dialects

Chamba State), Chambiāli (spoken in the rest of Chamba), Kuluhī (in Kulu), Kāngri (in Kangra), and Sirmaurī (in Nahan and most of the other Simla States) may be taken as the typical ones. Chambiāli has an alphabet of its own, in which types have been cast and books printed, and the other dialects use an alphabet of the same character called the Tānkri. It is a near relation of the Śāradā character used for writing Kāshmīrī. There are almost as many dialects spoken in the neighbourhood of Simla as there are states in that region. The special form of speech used as a vernacular by the natives of Simla itself is known as Keonthali, but they may all be classed as closely connected with Sirmaurī. So far as I am aware, none of these dialects have any literature, but parts of the Scriptures have been translated into Chambiāli. We have grammars of Gadī (one of the forms of Chambiāli) and of Kuluhī. In Lahaul, Spiti, and Kanawar, the languages spoken are Tibeto-Burman, and there are also colonies of speakers of Tibeto-Burman in Kulu.

599. Central Pahārī includes the languages employed in Garhwal, Kumaon, and Western Nepal. It has three well-known dialects,—Garhwāli, spoken mainly in Garhwal and the country round the hill station of Mussoorie, Jaunsārī, spoken in the Jaunsar tract of Dehra Dun; and Kumaunī, spoken in Kumaon (including the hill station of Naini Tal) and Western Nepal. These dialects vary considerably from place to place, every pargana having a form of speech with a local name of its own. The form of Kumaunī which is spoken in Western Nepal is usually known as Palpa, from the town of that name. None of these dialects have any literature. The Serampur missionaries published translations of the New Testament into Garhwāli, Kumaunī, and Palpa, in the early part of the last century, and versions of portions of the same have lately been made into Garhwāli and Jaunsārī. During the past few years, also, some excellent little books illustrating these hill languages have been published by native scholars. Of all the Pahārī dialects these Central ones agree most closely with Rājasthānī.

600. Eastern Pahārī is the language usually known as Naipālī (not a good name, as it is only one of many languages spoken in Nepal). Natives of Nepal call it Khas, *i.e.*, the language of the Khasas, and it is also called Gōrkhiyā or Gōrkhālī, and Pārhatiyā. This language has a small literature, the only example of which I have seen being a Rāmāyana printed in Benares some years ago. The language has hardly been seriously studied by English scholars, although one or two vocabularies and grammars have been published, but it has received a good deal of attention from Russian and German savants*. It is little spoken in British India, except by some of our Gurkha troops. Like the other Pahārī languages, it is closely connected with Rājasthānī. We have a version of the New Testament in Naipālī published by the Serampur missionaries at the commencement of the last century, and since then other versions of parts of the Scriptures have been issued. We know little about Eastern Pahārī Dialects. Dadhī or Dahī is one of them, which is spoken in the Nepal Terai. It is a broken form of speech.

Other Linguistic Families.

601. The only Semitic language which is a vernacular of the British Empire in the East is Arabic, most of the speakers of which are found in Aden.

The remainder may be put down to traders. Similarly, out of the 5,530 speakers of the Hamitic Somali, 5,494 were returned from Aden, the remainder being found in Bombay City.

Unclassed Languages.

602. There remain a few languages, which for various reasons do not admit of classification.

603. The word "Gipsy", used in dealing with the Gipsy tribes of India, is employed in its purely conventional sense of "Vagrant", and should not be taken as in any way suggesting their connection with the Roman Chals of Europe. Regarding the dialects spoken by them, I cannot do better than to quote the Gipsy dialects 344,143 words used by Mr. Baines in the last Census report —

"It is out of the question to distribute these languages amongst those having fixed dialects, as their character changes with the locality most favoured by the tribe using them, and while retaining a backbone

* This is also true of the other great language of Nepal—Nēwārī, which is of Tibeto-Burman origin. Nearly all that can be learnt regarding it must be sought for either in Russia or in Germany.

peculiar to itself, freely assimilates the local vocabulary and pronunciation. The most prevalent of these dialects is that of the Brinjārās or Lambānis, the carriers of Upper and Central India, which is based on a sub-Himalayan Hindī vernacular. The tribe, however, is found as far south as the Madras table-land, and it is not improbable that the Lambānī of the Deccan could hardly make himself understood by the corresponding caste further north. Again, the earthworkers, called Od or Waddar, carry a language of their own, from Peshawar to the sea, using a vocabulary less and less Dravidian as the tribe frequents tracts farther away from the East Deccan, from whence it probably originated. More difficult still, as regards classification, are the dialects used by the less reputable tribes of wanderers, such as the nominal Hindī of the thieving and mat-weaving castes of Hindustan, and the Telugu and Marāthī of the acrobats and pickpockets of the Deccan. All these can doubtless be divided into degraded forms of either Hindī or Telugu; but in doing so we have to disregard the local characteristics just mentioned, so that they have all been taken under a heading of their own, namely, Gipsy dialects."

I have little to add to the above, except to explain that these Gipsy dialects have not yet been touched by the Linguistic Survey, and that I am hence unable to say as yet what is the real basis of each. It may, however, be added that at least some of these tongues, such, for instance, as those of the Nats and Dōms, are simple thieves' patters, made up by altering the order of the letters in good Hindī words. Just as a London thief transforms "police" to "iclop," or "slop," so a Magahiya Dōm refers to a Jamadar of Police as the "Majadār" or "Sweet One." The Sānsis of the Punjab speak two languages. Their ordinary form of speech is probably connected with Western Pahārī, while their secret tongue is more of a thieves' patter. We may note in addition, as the language of a vagrant tribe, the Yerukala, also called Korchī and Korava. It is a dialect of Tamil, and is current over the Deccan. As regards the European Gipsies, it is well known that they are of Indian origin, and Musalmān historians describe to us the circumstances under which they entered Persia from India, and thence spread over the Western World. It is doubtful from what particular Indian tribe they have sprung, but, of late years, the best authorities have gradually come to the opinion that these "Rōms" or "Dōms" most probably spoke one of the Indo-Aryan languages which I have described above as non-Sanskritic. The Dōms of the present day are very widely spread over India, and have a thieves' slang of their own. In its grammar, Romani presents many remarkable points of similarity with the languages of the Outer Circle.

Burushaski

604. Burushaski is spoken by the brave tribes who inhabit Hunza Nagar and the neighbourhood, on our extreme North-Western frontier. Hitherto this has remained a riddle among languages. No philologist has as yet satisfactorily succeeded in placing it under any known family of speeches. One gentleman has claimed to be able to class it as a "Siberio-Nubian" tongue, a name which may be comforting to some people, and which has the doubtful advantage of being unintelligible to every one except its inventor. At present we must be content to accept the existence of a curious and interesting language lying at a place where Turkī, Tibeto-Burman, Indo-Aryan, and Eranian languages all meet. No speakers of this language have been recorded at the present census, their home lying far beyond the area of its operations.

Burushaski has many names. The neighbouring races call it Khajuna, the Nagar people call it Yashkun, and the Yarkandis Kūnjūtī. The dialect spoken in Yasin and the neighbourhood is known as Warshikwār. The language has a fully conjugated verb, with two numbers and three persons, and its most characteristic feature is the extremely frequent use which is made of pronominal prefixes, so as sometimes to alter greatly the appearance of a word. Thus, "my wife" is *aus*, but "thy wife" is *gus*, "to make him" is *etas*; "to make you" is *mamaritas* if you are a gentleman, but *matas* if you are a lady.

Andamanese

605 Finally, there are the languages of the Andaman islanders. Philologists have not yet succeeded in connecting them with any recognized family of speech. They are all agglutinative, making free use of prefix, infix, and suffix, and are adapted only to the expression of the more simple ideas. Abstract ideas are almost beyond their power of expression, and meaning is eked out by the free use of gesture

Andamanese

1,882

Vernaculars of other Countries, Asia and Africa.

606. Of the Eranian languages which are not vernaculars of India, Persian is the only one which appears in the tables. It has already been dealt with. The cognate Armenian is represented by a couple of hundred speakers. It is the parent tongue of a small colony of that race in Bengal, Lower Burma, and a few other parts of India. Most of them are permanently domiciled in the country, and many use English as their vernacular.

SEMITIC LANGUAGES.	
Hebrew	1,280
Syriac	40
	1,320

MONGOLIAN LANGUAGES.	
Osmanli	321
Turki	90

OTHER ASIATIC LANGUAGES	
Japanese	303

607. Arabic has been dealt with as one of the vernaculars of Aden. Hebrew is hardly a mother tongue. It was returned by Jews, and its return in each case probably means little more than that the head of the house was conversant with the language of his sacred books.

608. Two forms of Turki have been returned as noted in the margin. The speakers are few in number, and are all temporary residents.

609. The only other languages of Asia which have been recorded are Chinese and Japanese. The former has been described under the head of Indo Chinese languages. Japanese is spoken by a few visitors.

610. Of the African languages, Somali is the one which has been returned by the greatest number. It has been dealt with under the head of vernaculars of India. The others are given in the margin. The most important are Swahili of Zanzibar and Amharic cum Negro. The latter probably represents what is called in the vernacular "*habshī*" or Abyssinian, but is used in a much wider sense to mean an inhabitant of any portion of East Africa. Most of these African languages are spoken by the "Seedec boys" employed on board steamers. There are also a few children captured in slave dhows who have been made over to orphanages in Bombay, and servants in the households of chiefs and rich natives. The employment of *Habshī* slaves dates from the time of the Musalmān invasion, and we find them mentioned in vernacular literature as far back as the 16th century.

Dankali	63
Amharic (including Negro)	249
Swahili	321
Others	4

European Languages.

INDO-EUROPEAN	269,975
<i>Teutonic</i>	
English	254,510
Dutch	252,388
Flemish	375
Norwegian	8
Swedish	15
Danish	82
German	67
	1,580
<i>Romance</i>	
Italian	14,790
Latin	993
Maltese	38
Roumanian	34
French	1
Spanish	1,065
Portuguese	233
	12,426
<i>Keltic</i>	
Welsh	24
Gaelic	12
Irish	3
	8
<i>Slavonic</i>	
Russian	393
Czech	390
Polish	1
	2
<i>Greek</i>	
Greek	258
	258
MONGOLIAN	22
<i>Ural-Altai</i>	
Magyar	22
Finnish	21
	1
TOTAL EUROPEAN	269,997

611. Of the many European languages which were returned as spoken in India, English is the only one which is strongly represented. It includes not only the language of persons born in the United Kingdom, but also scattered individuals whose homes are in Australia, Canada, the United States, etc., and also the increasing class of Europeans of British descent born and domiciled in India, and the Eurasians. Of the other languages returned, German, Greek, and most of the Romance ones may be taken as mainly the languages of commercial sojourners. Latin was returned by a few missionaries of Italian or Portuguese nationality. Portuguese, which was apparently not returned at the last Census, is mainly represented by the half-caste Goanese of Western India. The Keltic languages are probably returned in some cases by people whose home language is good English, and whom patriotism has induced to show themselves as more familiar with Welsh, Gaelic, or Irish, than they really are. Some of the entries are, however, no doubt due to members of Welsh, Scotch, or Irish regiments which happen to be stationed in India. The minor languages are in many cases those spoken on board vessels in our ports, and the absence or presence of a single ship may make a considerable proportionate difference in the number of speakers of each.

612. The total number of speakers of European languages shows an increase of about 24,000 over the figures shown in 1891. One reason is the inclusion of 12,426 speakers of Portuguese in the present return. English shows an increase of about 13,000, which is sufficiently accounted for by changes in the European garrison, and by the natural increase in the domiciled English population and in the Eurasian community. Italian, Dutch, and Russian also show large proportionate increases, due, in each case, to the presence of men-of-war at Aden on the Census night. German and French show a considerable decrease, possibly owing to a corresponding absence of ships. The Keltic languages also show a great decrease, no doubt owing to absence of Welsh, Scotch, and Irish Regiments who were busily employed impressing their *perfervidum ingenium* upon South Africa. The other items are too insignificant and too accidental to require comment.

Conclusion.

613 With the European languages we complete our survey of the tongues spoken in India, whether as vernaculars or by foreigners. India is a land of contrasts, and nowhere are these more evident than when we approach the consideration of its vernaculars. There are languages whose phonetic rules prohibit the existence of more than a few hundred words, which cannot express what are to us the commonest and most simple ideas; and there are others with opulent vocabularies, rivalling English in their copiousness and in their accuracy of idea-connotation. There are languages every word of which must be a monosyllable, and there are others with words in which syllable is piled on syllable, till the whole is almost a sentence in itself. There are languages which know neither noun nor verb, and whose only grammatical feature is syntax; and there are others with grammatical systems as complete and as systematically worked out as those of Greek or Latin. There are languages with a long historical past reaching over thirty centuries; and there are others with no tradition whatever of the past. There are the rude languages of the naked savages of Eastern Assam, which have never yet been reduced to writing, and there are languages with great literatures adorned by illustrious poets and containing some of the most elevated deistic sentiments which have found utterance in the East. There are languages, capable in themselves of expressing every idea, which are nevertheless burdened with an artificial vocabulary borrowed from a form of speech which has been dead for two thousand years, and there are others, equally capable, that disdain such fantastic crutches, and every sentence of which breathes the reek of the smoke from the homesteads of the sturdy peasantry that utters it. There are parts of India that recall the plain in the land of Shinar where the tower of old was built, and in which almost each of the many mountains has its own language, and there are great plains, thousands and tens of thousands of miles in area, over which one language is spoken from end to end.

And over all there broods the glamour of eastern mystery. Through all of them we hear the inarticulate murmur of past ages, of ages when the Aryans wandered with their herds across the steppes of Central Asia, when the Indo-Chinese had not yet issued from their home on the Yang-tse-kiang, and perhaps when there existed the Lemurian continent where now sweep the restless waves of the Indian Ocean.

Light comes from the East, but many years must yet be passed in unromitting quest of knowledge before we can inevitably distinguish it from that false dawn which is but a promise and not the reality. Hitherto scholars have busied themselves with the tongues and thoughts of ancient India, and have too often presented them as illustrating the India of the present day. But the true India will never be known till the light of the West has been thrown on the hopes, the fears, the beliefs, of the two hundred and ninety-four millions who have been counted at the present census. For this, an accurate knowledge of the vernaculars is necessary, a knowledge not only of the colloquial languages, but also, when they exist, of the literatures too commonly decried as worthless, but which one who has studied them and loved them can confidently affirm to be no mean possession of no mean land.

SUBSIDIARY TABLE I.

Languages spoken in India, number of persons speaking them, etc.

Family, Sub-Family, Branch, and sub-Branch	Group and Sub Group	Language	Total number of speakers	Number per million of total population	Where chiefly spoken	Total number of books printed in each language during the decennium *
Malayo-Polynesian Family.	Malay Group.	Selung or Selon	1,318	4	Burma	
		Nicobarese	6,513	22	Andamans and Nicobars	
		Mon, Talaing or Peguan . .	174,510	595	Burma	3
		Palaung	67,756	231	Do	
		Wa	7,667	26	Do	
		Khasi	177,827	606	Assam	37
Indo-Chinese Family. Mon-Khmer Sub-Family	Tibeto-Burman Sub-Family. Tibeto-Himalayan Branch.	Bhotia of Tibet or Tibetan .	14,812	50	United Provinces, Bengal and Kashmir	
		Bhotia of Baltistan or Balti	130,678	415	Kashmir State	
		Bhotia of Ladakh or Ladakhi	90	0 3	Punjab	
		Sharpā Bhōtiā	4,407	15	Bengal	
		Bhotia of Sikkim or Denjong-ke	8,825	30	Bengal States	
		Bhotia of Bhotan or Lho-ke .	40,765	139	Punjab States, Punjab and Bengal	
		Bhotia (others)	35,822	122	Kashmir State	
		Laluli	9,513	32	Punjab	
		Kanawari or Multham . . .	19,535	67	Do	
		Kanai	11	...	Assam	
		Bhuanu	15	.. ...	Do	
		Padhi, Pahi or Pahi . . .	268	1	Do	
		Hayu or Vayu	114	0 3	Do	
		Khanti (Khambu or Jimdar) .	43,954	150	Bengal	
		Khanti (Yakha)	1,366	5	Do	
		Kiranti (others)	64	0 2	Assam	
		Gurung	7,481	26	Bengal and Assam	
		Sunuwar	5,365	18	Bengal	
		Tham	319	1	Do	
		Mangai	18,176	63	Bengal and Assam	
		Newari	7,873	27	Bengal	
		Mumi	32,167	110	Do	
		Manjhi	902	3	Do	
		Rong or Lepcha	19,291	66	Do	
		Lumbu	23,200	79	Do	
		Dhimal	611	2	Do	
		Aka	26	0 1	Assam	
		Dafla	805	3	Do	
		Abor-nuni	10,829	139	Do	
		Mishmi	71	0 2	Do	
North-Assam Branch.	Bodo Group	Bodo or Plains Kachari	239,458	816	Assam and Bengal.	
		Lalung	16,414	56	Assam	

* The figures in this column are exclusive of those for Central Provinces, Coorg, Cochin, Kashmir, Mysore, Rajputana, and Travancore for which the required information is not available

SUBSIDIARY

Languages spoken in India, number

Family, Sub-Family, Branch, and Sub-Branch	Group and Sub-Group	Language	Total number of speakers	Number per million of total population	Where chiefly spoken	Total number of books printed in each language during the decennium
Indo-Chinese Family—contd Tibeto-Burman Sub-Family—contd Assam-Burmese Branch—contd	Bodo Group.	Dima-sa	12,940	68	Assam.	19
		Chutia	2,364	8	Do.	
		Garo	185,940	634	Assam and Bengal.	
		Rabha	20,243	69	Assam.	
		Tipura or Miung	111,974	382	Bengal and Assam	
		Moran	78	0.2	Assam	
	Naga Group.	Mikir	83,620	285	Do	1
		Naga Bodo Sub-Group				
		Empeo or Kachha Naga	6,604	23	Do	
	Western Naga Sub-Group.	Kabui	4	...	Do.	
		Angami	27,865	95	Do	
		Kerhama	1,546	5	Do	
		Bengima	5,617	19	Do.	
	Central Naga Sub-Group	Sema	5,830	20	Do	
		Ao	28,135	96	Do	
		Lhota or Tsontsu	16,962	58	Do.	
		Thukumi	26	0.1	Do	
	Eastern Naga Sub Group	Yachumi	35	0.1	Do	
		Tableng	198	1	Do	
		Tamlu	1,545	5	Do.	
	Naga Unclassed	Mojung	152	1	Do.	
		. . . .	69,611	237	Do
	Kuki-Chin Group.					19
		Meitei Sub-Group				
		Manipuri, Meitei, Kathe or Ponnui	272,997	931	Assam and Bengal.	
		Old Kuki Sub-Group				
		Bangkhoh	4,766	16	Assam.	
		Hallam	3,693	13	Bengal	
		Andro	1		United Provinces.	
		Mbat	169	1	Assam	
		Chaw	215	1	Burma	
		Northern Chin Sub-Group				
		Thado or Jangshay	3,399	12	Assam	
	Central Chin Sub Group	Sairang	71	0.2	Do.	
		Zahao	3,216	11	Do.	
		Lushai or Dulien	72,112	246	Do	
		Banjog	560	2	Bengal	
		Pangkhu	113	0.3	Do	

TABLE I—*contd.*of persons speaking them, etc.—*contd.*

Family, Sub Family, Branch, and Sub Branch	Group and Sub-Group	Language.	Total number of speakers	Number per million of total population	Where chiefly spoken	Total number of books printed in each language during the decennium
Indo-Chinese Family—<i>contd.</i> Tibeto-Burman Sub-Family—<i>contd.</i> Assam-Burmese Branch—<i>contd.</i>	<i>Southern Chin Sub-Group</i>	Yindu	43	0 1	Burma	
		Khyeng	414	1	Bengal.	
		Khami, Khweymu or Kumi	25,863	88	Burma	
		Ann	775	3	Do	
		That	67	0 2	Do	
	<i>Unclassed Languages.</i>	Kuki (unspecified)	53,880	184	Assam and Bengal	
		Chin (unspecified)	181,765	620	Burma	1
	<i>Kachin Group.</i>	Kachin or Singpho	67,340	230	Do	11
	<i>Kachin Kachin Burma Hybrids.</i>	Szi Lepai	756	3	Do	
		Lashu	84	0 2	Do	
		Maru	151	1	Do	
		Maingtha	465	2	Do	
	<i>Other Hybrids</i>		56,979	194	Do	
	<i>Burma Group.</i>	Mru	23,898	81	Bengal and Burma	
		Burmese	7,474,896	25,481	Burma and Bengal	701
Siamese-Chinese sub-Family.	<i>Sinitic Group.</i>	Karen	887,875	3,027	Burma	42
	<i>Tai Group.</i>	Siamese	19,536	67	Do	
		Lu	19,380	66	Do	
		Khun	42,160	144	Do.	
		Shan	753,262	2,568	Do	8
		Phakial	289	1	Assam	
		Nora	2		Do	
		Tai-rong	12		Do	
		Aiton	1,569	5	Do	
Dravido-Munda Family. Munda Sub-Family.		Santali or Hor	1,790,521	6,101	Bengal and Assam	
		Kol	948,687	3,234	Do	
		Korwa	16,442	56	Bengal	
		Kharia	101,986	318	Bengal and Central Provinces	
		Juang or Patua	10,853	37	Bengal States	
		Asur	4,872	17	Bengal	
		Kora or Koda	23,873	81	Do	
		Gadaba	37,230	127	Madras	
		Savara	157,136	536	Do	
		Korku	87,675	299	Central Provinces and Berar	

SUBSIDIARY

Languages spoken in India, number

Family, Sub-Family, Branch and Sub-Branch	Group and Sub-Group	Language	Total number of speakers	Number per million of total population	Where chiefly spoken	Total number of books printed in each language during the decennium	
Dravido-Munda Family— <i>contd</i> Dravidian Sub-Family		Tamil or Arava	16,525,500	56,341	Madras and Mysore .	2,366	
		Malayalam	6,029,304	20,556	Madras	372	
		Telugu or Andhra	20,696,872	70,562	Madras, Hyderabad and Mysore	2,396	
		Kanarese	10,365,047	35,338	Bombay, Mysore, Madras, Hyderabad.	545	
		Kodagu or Coorgi	39,191	134	Coorg.		
		Tulu	535,210	1,825	Madras	11	
		Toda	805	3	Madras		
		Kota	1,300	4	Do.		
		Gond	1,125,479	3,837	Central Provinces, Berar, Hyderabad.		
		Kandh or Kui	494,099	1,685	Madras, Central Provinces, Bengal.		
		Kurukh or Oraon	591,886	2,018	Bengal		
		Malhar	465	2	Bengal States		
		Multo or Maler	60,777	207	Bengal		
		Brahui	48,589	166	Bombay	2	
Indo-European Family, Aryan Sub-Family Iranian Branch Indian Branch Non-Sanskritic Sub-Branch. Sanskritic Sub-Branch.	Eastern Group	Baloch	152,188	519	Bombay and Punjab	5	
		Pashto	1,224,807	4,176	N.-W. F. Province, Punjab.	107	
		Munjani or Mungi	28	0.1	Assam		
	Shina Khovar Group.	Khovar, Arniya or Chatrani .	233	1	Kashmir State . .	1	
		Shina	54,192	185	Do.		
	Sanskrit Group.	Sanskrit	716	2	Madras and Mysore .	2,714	
		North-Western Group	Kashmiri	1,007,957	3,436	Kashmir State . .	23
			Kohistani	36	0.1	N.-W. F. Province	
			Lahnda	3,337,917	11,380	Punjab, and N.-W. F. Province	
			Sindhi	3,006,395	10,250	Bombay	620
	Southern Group.	Marathi	18,237,899	62,179	Bombay, Berar, Central Provinces and Hyderabad.	1,949	
	Eastern Group.	Oriya	9,687,429	33,028	Bengal, Madras and Central Provinces	1,336	
		Bihari	37,076,990	126,408	Bengal and United Provinces		
		Bengali	44,624,048	152,138	Bengal and Assam .	9,706	
		Assamese	1,350,846	4,605	Assam	217	

TABLE I—*contd.*of persons speaking them, etc.—*contd*

Family Sub Family, Branch, and Sub- Branch	Group and Sub Group	Language	Total number of speakers	Number per million of total population	Where chiefly spoken	Total number of books printed in each language during the decennium	
Indo-European Family—<i>contd</i> Aryan Sub-Family— <i>contd</i> Sanskritic Sub- Branch—<i>contd.</i>	Mediate Group.	Eastern Hindi	20,986,858	71,549	United Provinces, Central Provinces and Central India	14,395 (Including 10,879 in Urdu)	
	Western-Group.	Western Hindi	39,367,779	134,218	United Provinces, Punjab, Rajputana, Central India, Central Provinces and Hyderabad		
		Rajasthani	10,917,712	37,222	Rajputana, Central India, Central Provinces, Punjab and Bombay.		10
		Gujarati *	9,928,501	33,850	Bombay, Rajputana, Central India and Baroda		2,628
		<i>Bhil languages</i>	759,928	2,591	Central India and Rajputana.		
		<i>Khandeshi</i>	2,742	9	Bombay		
		Punjabi	17,070,961	58,201	Punjab and Kashmir		2,587
	Northern Group.	Western Pahari	1,710,029	5,830	Punjab and Kashmir	2	
		Central Pahari	1,270,931	4,333	United Provinces . .		
		Eastern Pahari or Naipali	143,721	490	Bengal, Assam and United Provinces		
	Semitic Family.		Arabic	42,881	146	Hyderabad and Bombay	897
	Hamitic Family.		Somali	5,530	19	Bombay	
	Unclassified Languages.		Andamanese	1,882	6	Andamans	
			Gipsy languages	344,143	1,173	Hyderabad, Berar, Bombay, Central Provinces and Mysore	
			Others	125	0.4	Ajmer-Merwar	
Indo-European Family.	Iranian Group.	Persian	20,748	71	Bombay, Punjab and Mysore	1,166	
		Wakhi	15	...	Assam		
	Armenian Group.	Armenian	205	1	Bengal		
Semitic Family.							
Northern Branch.		Hebrew	1,280	4	Bengal, Bombay, and Burma		
		Syriac	40	0.1	Malibu Coast		
Hamitic Family.	Ethiopic Group.	African Dialects	2		..		
		Dankali	63	0.2	Bombay		
		Abyssinian (including Negro)	249	1	Do		

* Includes Khandeshi and Bhil Languages

SUBSIDIARY TABLE I—concl'd.

Languages spoken in India, number of persons speaking them, etc.—concl'd

Family Sub Family, Branch and Sub Branch	Group and Sub Group.	Language	Total number of speakers	Number per million of total population.	Where chiefly spoken	Total number of books printed in each language during the decennium
Mongolian Family.	Ural Altaic Group.	Turkish Dialects	411	1	Bombay	
	Japanese Group.	Japanese	363	1	Bombay and Burma.	
	Monosyllabic Group.	Chinese	50,513	172	Burma and Bengal.	
Malayo-Polynesian Family.	Malayan Group.	Javanese	1	..		
		Malay	2,460	8	Burma.	
Bantu Family.		Swahili (Zanzibar)	321	1	Bombay	
		Sida	2	.	Central Provinces.	
Indo-European Family.	Greek Group.	Greek (Romaine)	258	1	Bombay and Burma.	
	Romanic Group.	Italian	993	8	Bombay and Bengal	
		Latin	88	0 1	Central Provinces	
		Maltese	34	0 1	Bombay	
		Roumanian	1	...		
		French	1,065	4	Madras, Bombay and Bengal	
		Spanish	233	1	Bombay and Burma.	
		Portuguese	12,426	42	Bombay and Madras.	
	Celtic Group.	Welsh	12		Assam.	
		Gaelic (Scotch)	3	..	Mysore State	
		Irish	9	.	United Provinces.	
	Balto-Slavonic Group (Slavonic).	Russian	390	1	Bombay.	
		Bohemian (Czech)	1	...	Madras.	
		Polish	2	..	Bengal and Mysore.	
	Teutonic Group.	English	252,388	860	Everywhere.	6,971
		Dutch	376	1	..	
		Flemish	3	...	...
		Norwegian	15	..	Bombay.	
		Swedish	82	0 2	Burma and Madras.	
		Danish	67	0 2	Madras and Bombay.	
		German	1,680	5	Bombay, Bengal, Madras and Burma..	
Mongolian Family.	Ural Altaic Group	Finnish	1	.	..	
		Hungarian (Magyar)	21	...	Bengal and Bombay	

This Table does not contain the figures for Languages not returned or not identified, traced, etc..

CHAPTER VIII.

Religion.

Part I. — Descriptive.

614. The oldest of the religions recorded in the Census, if indeed it can be ^{Animism} called a religion at all, is the medley of heterogeneous and uncomfortable superstitions now known by the not entirely appropriate name of Animism. The difficulty of defining this mixed assortment of primitive ideas is illustrated by the fact that there is no name for it in any of the Indian languages. For Census purposes, therefore, recourse must be had to the clumsy device of instructing the enumerators that in the case of tribes who are neither Hindus nor Muhammadans, but have no word for their religious beliefs, the name of the tribe itself is to be entered in the column for religion. Thus one and the same religion figures in the original returns of the Census under as many different names as there are tribes professing it. On turning to the European literature of the subject we find that even among scientific observers the curiously Protean character of the beliefs in question has given rise to considerable diversity of nomenclature. Three different names, each dwelling on a different aspect of the subject, have obtained general acceptance, and an attempt has been made to introduce a fourth which seeks to accentuate characteristics overlooked by the rest.

615. The earliest and best known name, Fetishism, was first brought into prominence by Charles de Brosses, President of the Parliament of Burgundy, who published in 1760 a book called *Du Culte des Dieux Fétiches, ou Parallele de l'ancienne Religion de l'Egypte avec la Religion actuelle de la Nigritie*. De Brosses was a man of very various learning. He ranked high in his day among the historians of the Roman Republic; he wrote a scientific treatise on the origin of language; he is recognized as one of the founders of the modern school of anthropological mythology; and he is believed to have invented the names Australia and Polynesia. He did not however invent, nor was he even the first to use, the word fetish, which is a variant of the Portuguese *fetico* or *fetisso*, an amulet or talisman, derived from the Latin *factitius*, 'artificial', 'unnatural', and hence 'magical'. It was employed, naturally enough, by the Portuguese navigators of the sixteenth century to describe the worship of stocks and stones, charms, and a variety of queer and unsavoury objects, which struck them as the chief feature of the religion of the negroes of the Gold coast. Nor did de Brosses travel so far on the path of generalization as some of his followers. He assumed indeed that Fetishism was the beginning of all religion, since no lower form could be conceived; but he did not extend its domain like Bastholm, who in 1805 claimed as fetishes "everything produced by nature or art which receives divine honour, including sun, moon, earth, air, fire, water, mountains, rivers, trees, stones, images, and animals if considered as objects of divine worship."

Earlier
nomenclature
— Fetishism

For some five and twenty years after Bastholm wrote the term Fetishism lay buried in the special literature of anthropology, whence it seems to have been unearthed by Auguste Comte, who used it, in connexion with his famous *loi des trois états*, as a general name for all the forms of primitive religion which precede and insensibly pass into polytheism. Comte described the mental attitude of early man towards religion as "pure fetishism, constantly characterized by the free and direct exercise of our primitive tendency to conceive all external bodies soever, natural or artificial, as animated by a life essentially analogous to our own, with mere differences of intensity"* His authority, combined with the natural attractions of a cleanly cut definition, gave wide currency to this extended sense of the word, and it is only of late years that it has been confined to the particular class of superstitions to which the Portuguese explorers originally applied it. In the light of our present knowledge Fetishism may be defined as the worship of tangible inanimate objects believed to possess in themselves some kind of mysterious power. Thus restricted the term marks

* Comte, *Philosophie Positive*, vol. V, p. 30, quoted by Tylor

out a phase of primitive superstition for which it is convenient to have a distinctive name

Shamanism

616. We have seen how Fetishism came to us from the west coast of Africa. For the origin of Shamanism we must look to Siberia. Shaman is the title of the sorcerer-priest of the Tunguz tribe of Eastern Siberia between the Yenisei and Lena rivers. The word has been supposed to be a variant of the Sanskrit *Sramana*, Pali *Samana*, which appears in the Chinese *sha-man* or *shi-man* in its original sense of a Buddhist ascetic, and may have passed into the Tunguz language through the Manchu form *Saman*. Ethnologists seem to have been introduced to it by the writings of the German explorer and naturalist Peter Simon Pallas, who travelled through the Tunguz country up to the borders of China in 1772, and wrote a lengthy account of his wanderings.* The essence of Shamanism is the recognition of the Shaman, medicine man, wizard, or magician as the authorized agent by whom unseen powers can be moved to cure diseases, to reveal the future, to influence the weather, to avenge a man on his enemy, and generally to intervene for good or evil in the affairs of the visible world. The conception of the character of the powers invoked varies with the culture of the people themselves. They may be gods or demons, spirits or ancestral ghosts, or their nature may be wholly obscure and shadowy. In order to place himself *en rapport* with them, the Shaman lives a life apart, practises or pretends to practise various austerities, wears mysterious and symbolical garments, and performs noisy incantations in which a sacred drum or enchanted rattle takes a leading part. On occasion he should be able to foam at the mouth and go into a trance or fit, during which his soul is supposed to quit his body and wander away into space. By several observers these seizures have been ascribed to epilepsy, and authorities quoted by Peschel go so far as to say that the successful Shaman selects the pupils whom he trains to succeed him from youths with an epileptic tendency. It seems possible however that the phenomena supposed to be epileptic may really be hypnotic. In this and other respects there is a general resemblance between the Shaman and the spiritualist medium of the present day. Both deal in much the same wares and spiritualism is little more than modernised Shamanism. Nevertheless, though the principle of Shamanism is proved, by these and other instances, to be widely diffused and highly persistent, it does not cover the entire field of primitive superstition, and it is misleading to use the name of a part for the purpose of defining the whole. Still less can we follow Lubbock in treating Shamanism as "a necessary stage in the progress of religious development," or Peschel in extending the term to the priesthoods of organized religions like Buddhism, Brahmanism and Islam. Traces of Shamanism may have survived in all of them, as in the witchcraft trials of modern Europe; but to call their hierarchy Shamanistic is to ignore historical development and to confuse the Yogi with the Brâhman, and the Fakir with the Mullah.

Original meaning of Animism

617 The word Animism was first used to denote the metaphysical system of Georg Ernst Stahl, the originator of the chemical hypothesis of Phlogiston, who revived in scientific form the ancient doctrine of the identity of the vital principle and the soul. In his *Theoria medica vera* published at Halle in 1707, Stahl endeavoured, in opposition to Hoffmann's theory of purely mechanical

* Pallas uses the words *Schaman* and *Schamanin*, (Zauberer and Zauberin) in his curious book *Sammlungen historischer Nachrichten über die Mongolischen Völkerschaften*, printed at St Petersburg in 1776 by the Imperial Academy of Science. Chapter VII of the second volume (1801) entitled 'Von den Gaukelgeyen des Schamanischen Aberglaubens, Zaubereyen und Weissagerey unter den Mongolischen Völkern', deals with the survivals of Shamanism which Pallas found among the Kalmucks and Mongols 'painted over' as he says (ubertüncht) 'with a coat of the later Buddhistic doctrine'. But he does not profess to treat of Shamanism at length, and remarks that this would be superfluous as 'full particulars are to be found in the Siberian Travels of the elder Gmelin and in Georgi's Description of the Nations of the Russian Empire'. The 'Elder Gmelin' was Johann Georg, born 1709, who travelled in Siberia from 1733 to 1743 and published his *Reisen durch Sibirien* in four octavo volumes at Göttingen in 1751-52. He became Professor of Botany at Tübingen in 1749, six years before his death. He was also the author of the *Flora Sibirica*, two volumes of which were published during his life, while the remaining two were edited by his nephew Samuel Gottlob Gmelin, who travelled with Pallas in Siberia. After leaving Pallas, Samuel went to the Caucasus, was captured by the Khan and died in prison at the age of thirty-one. I mention these particulars, for which I am indebted to my friend Major Prain, because it seems possible that the word 'Shaman' may have been introduced, not by Pallas, but by Johann Georg Gmelin. The Gmelins were a notable family and no less than seven of them wrote books on botany at dates ranging from 1699 to 1806. None of their books are to be had in Calcutta, so I am unable to verify the conjecture thrown out above.

The copy of Pallas's *Sammlungen* in the library of the Asiatic Society of Bengal appears, from a note on the title page, to have been presented by the Emperor of Russia in 1845. The second volume was published twenty-five years after the first and bears the imprimatur of the St Petersburg Censor, which is wanting in the first.

causation, to trace all organic functions to the action of an inherent immaterial substance or *anima*. In his great work on Primitive Culture Mr. E. B. Tylor transferred the term from Metaphysics, where it had had its day, to Ethnology, where it has taken root and flourished, and made the idea which it conveys the basis of his exposition of the principles underlying primitive religion. "It is habitually found" he writes "that the theory of Animism divides into two great dogmas forming parts of one consistent doctrine; first, concerning souls of individual creatures, capable of continued existence after the death or destruction of the body; second, concerning other spirits, upward to the rank of powerful deities. Spiritual beings are held to affect or control the events of the material world, and man's life here and hereafter; and it being considered that they hold intercourse with men, and receive pleasure or displeasure from human actions, the belief in their existence leads naturally, and it might also be said inevitably, sooner or later to active reverence and propitiation. Thus Animism, in its full development, includes the belief in souls and in a future state, in controlling deities and subordinate spirits, these doctrines practically resulting in some kind of active worship."*

Here for the first time we are presented with a name derived from careful comparison and analysis of a large body of facts, and purporting to express the central and dominant idea underlying primitive religion. The advance on the earlier terminology is immense. We have passed from the superficial to the essential, from the casual impressions of traders and travellers to the mature conclusions of a skilled observer. Animism however has not escaped criticism. In his Gifford Lectures on Natural Religion Professor Max Muller condemned it as "so misleading a name that hardly any scholar now likes to employ it;" while Mr. Stuart-Glennie † attacks it on the ground that it ignores or misrepresents the earliest phase of human belief which he holds to be "characterised by a conception of all the objects of Nature as themselves living, not as living because they are the abode of spirits; but as living because of their own proper powers, or because they are self-power." This stage of primitive philosophy Mr. Stuart-Glennie would call Zoonism; for the next stage, where everything is put down to the action of indwelling spirits, he proposes the name Spiritism. The suggestion, I believe, has fallen absolutely flat. Mr. Tylor's Animism covers, if not the whole field, at any rate a large and conspicuous part of it, it has gained universal currency and is unlikely to be displaced. It is indeed almost inconceivable that any name should be devised which would embody a precise conception of the confused bundle of notions wrapped up in savage religion; and most reasonable people will feel that haggling over terminology is a thankless and futile form of intellectual exercise.

618. Accepting Animism, then, as the best name that we are likely to get, we may go on to examine some objections to which it is liable. First, it connotes or seems to connote the idea that gods are merely the ghosts or shadows of men, projected in superhuman proportions, like the spectre of the Brocken, on the misty background of the unknown, but still in their inception nothing but common ghosts. Definitions of course cannot be judged merely by etymology, but a name which appears to beg a controverted question is *pro tanto* not a good name. Moreover this particular name, failing the explanations necessary to bring out its limitations, seems to have done some real dis-service to science and that in a branch of investigation where a name counts for a great deal. One may almost say of Animism that it has given rise to a new bias, the anthropological bias. The theological or missionary bias we know and are prepared to discount. It leads those who are possessed by it to regard all alien gods in one case as devils and in another as degenerate survivals of an original revelation or intuition. But the tutored anthropologist is worse than the untutored missionary. He knows the game only too well; he sees what his theory of origins allows him to see and he unconsciously shapes the evidence in the collecting so as to fit the theory with which Mr. Tylor has set him up. Second, it admits of being confused with the idea, common to savages and children, that all things are animated, a notion not easy to reconcile with the ghost theory of religion, which is based on the assumption that primitive man was profoundly impressed by the difference between the dead and living and evolved therefrom the

* Tylor, *Primitive Culture*, i 426

† Introduction to *The Women of Turkey* by Mrs. Garnott

conception of spirit. Third, the name leaves out of account, or at any rate inadequately expresses, what may be called the impersonal element in early religion, an element which seems to me to have been rather overlooked

Ideas
underlying
Animism

619 Here I am reluctant to add yet another conjecture to a literature already so prolific in more or less ingenious guesses. But I have had the good fortune, while settling a series of burning disputes about land, to have been brought into very intimate relations with some of the strongest and most typical Animistic races in India and thus to have enjoyed some special opportunities of studying Animism in those forest solitudes which are its natural home. More especially in Chota Nagpur, where this religion still survives in its pristine vigour, my endeavours to find out what the jungle people really do believe have led me to the negative conclusion that in most cases the indefinite something which they fear and attempt to propitiate is not a person at all in any sense of the word. If one must state the case in positive terms, I should say that the idea which lies at the root of their religion is that of power, or rather of many powers. What the Animist worships and seeks by all means to influence and conciliate is the shifting and shadowy company of unknown powers or influences making for evil rather than for good, which resides in the primeval forest, in the crumbling hills, in the rushing river, in the spreading tree, which gives its spring to the tiger, its venom to the snake, which generates jungle fever, and walks abroad in the terrible guise of cholera, small-pox, or murrain. Closer than this he does not seek to define the object to which he offers his victim, or whose symbol he daubs with vermilion at the appointed season. Some sort of power is there, and that is enough for him. Whether it is associated with a spirit or an ancestral ghost, whether it proceeds from the mysterious thing itself, whether it is one power or many, he does not stop to enquire. I remember a huge Sal tree (*Shorea robusta*) in a village not far from my head-quarters which was the abode of a nameless something of which the people were mightily afraid. My business took me frequently to the village and I made many endeavours to ascertain what the something was. There was no reluctance to talk about it, but I could never get it defined as a god, a demon or a ghost. Eventually an Anglicised Hindu from another district took a speculative lease of the village and proceeded to enhance the rents and exploit it generally. One of the first things he did was to assert himself by cutting down the tree. Strange as it may seem, no one was the least alarmed at this sacrilegious act. The Hindu, they said, was a foreigner, so nothing could happen to him, while the villagers were blameless for they had not touched the tree. What was supposed to have become of its mysterious occupant I never could ascertain. The instance is typical of the Animistic point of view and has numberless parallels. All over Chota Nagpur there are many jungle-clad hills, the favourite haunts of bears, which beaters of the Animistic races steadfastly refuse to approach until the mysterious power which pervades them has been conciliated by the sacrifice of a fowl. Everywhere we find sacred groves, the abode of equally indeterminate beings, who are represented by no symbols and of whose form and functions no one can give an intelligible account. They have not yet been clothed with individual attributes; they linger on as survivals of the impersonal stage of early religion.

Impersonal
elemental
forces

620 If we assume for the moment the possibility that some such conception, essentially impersonal in its character, and less definite than the idea of a spirit, may have formed the germ of primitive religion, one can see how easily it may have escaped observation. The languages of wild people are usually ill-equipped with abstract terms, and even if they had a name for so vague and inchoate a notion it would certainly have to be translated into the religious vocabulary of their anthropomorphic neighbours. A Santal could only explain Marang Buru, the great mountain, by saying it was a sort of *Deo* or god. A Meeh or Dhimal could give no other account of the reverence with which he regards the Tista river, a name of mind amply justified by the destructive vagaries of its snow-fed current. On the same principle a writer* of the 17th Century says of the West African natives that 'when they talk to whites, they call their idolatry *Fitsiken*, I believe because the Portuguese called sorcery *futiso*.' In Melanesia, according to Dr. Codrington, 'plonty devil' is the

* W. J. Muller, *Die Afrikanische Landschaft Keta*, Nuremberg, 1675, quoted by Max Müller, *Anthropological Religion*, p. 120

standard formula for describing a sacred place, and the Fiji word for devil "has become the common appellation of the native ghosts or spirits." So it is with the Animistic races of India. If they are questioned about their religion they can only reply in terms of another religion, in Sanskrit derivatives which belong to a wholly different order of ideas. And when we find in Melanesia the very people who put off the inquisitive foreigner with the comprehensive word devil, still retaining the belief in incorporeal beings with neither name nor shape, round whom no myths have gathered, who are not and never have been human, who control rain and sunshine and are kindly disposed towards men, one is tempted to conjecture that the same sort of belief would be found in India by any one who could adequately probe the inner consciousness of the Animistic races.

621. The hypothesis that the earliest beginnings of savage religion are to be sought in the recognition of elemental forces to which, in the first instance, no personal qualities are ascribed, may perhaps afford an explanation of a problem which has exercised several enquirers of late,—the origin of the *fainéant* unworshipped Supreme beings who figure in savage mythology almost all over the world. The existence of such a belief does not fit in with some current theories of the origin of religion nor are the facts readily explained away. Mr. Tylor believes these beings to have been borrowed from missionary teaching; Mr. Andrew Lang holds that they "came, in some way only to be guessed at, first in order of evolution," and mentions, as "not the most unsatisfactory" solution of the problem, the hypothesis of St. Paul (Rom. i. 19) "Because that which may be known of God is manifest in them, for God hath shewed it unto them." We find distinct traces of them in Indian Animism, as will appear from the evidence collected in the Appendix to this Chapter, but in India no one has been at the trouble of speculating about their origin. Now, if man began merely by believing in undefined powers which he attempted to control by means of magic, is it not conceivable that the powers whose activity was uniformly beneficial should, as time went on, receive less attention than those which on occasion were capable of doing mischief? When natural conservatism has to some extent spent its force, magicians and their clients must by degrees perceive or must by accident discover that the rising of the sun is in no way dependent upon the imitative magical rites designed to secure its recurrence and these functions accordingly fall into disuse. Where the monsoon current is fairly regular the powers of the air tend to share the same fate, though the women of the tribe still preserve and occasionally practise the magic art of rain-making, stripping themselves naked at night and dragging a plough through the parched fields, as the Kochh women do to this day in Rangpur. But he would be a bold man who would venture to neglect the destructive powers of nature, the diseases which strike without warning, and the various chances of sudden and accidental death. When the era of anthropomorphism sets in and personal gods come into fashion, the active and passive powers of the earlier system are clothed in appropriate attributes. The former become departmental spirits or gods, with shrines and temples of their own and incessant offerings from apprehensive votaries. The latter receive sparing and infrequent worship, but are recognised, *en revanche*, as beings of a higher type, fathers and well-wishers of mankind, patrons of primitive ethics, makers of things who have done their work and earned their repose. The Santal Marang Buru represents the one; the Bongas or godlings of disease are examples of the other. With the transformation of impersonal powers into personal gods, magic too changes its character. The materialistic processes which consist of imitating the outward and visible effects of natural forces give place to spells, incantations and penances which are supposed to compel the gods to obey the commands of the magician. In course of time magic itself is ousted by religion and banished to those holes and corners of popular superstitions where it still survives in varying degrees of strength.

Origin of
unworshipped
supreme
beings

622. The theory carries us still further. It endeavours to account by the operation of known processes of thought not merely for what Mr. Lang calls "the high gods of low races", but for the entire congeries of notions from which the beginnings of religion have gradually emerged. It supposes that early man's first contact with his surroundings gave him the idea of a number of influences, powers, tendencies, forces, outside and other than himself, which affected him in various ways. His dealings with these were at first determined

Beginnings
of Religion.

by the rudimentary principle of association, common to men and other animals, that like causes like. In that early stage of his mental development the primitive philosopher did not impute personal attributes of any kind to the something not himself which made for his comfort or the reverse; nor did he suppose that the effects which the various somethings produced were brought about by the action of any individual even remotely resembling himself. Had he entertained any such idea it is difficult to see how magic could ever have come into existence, still less how it could have preceded the development of what we call religion. For the essence of magic is compulsion. "*Flectere si nequeo Superos, Acheronta movebo*" If certain operations are accurately gone through, certain results are bound to follow, as a mere sequence of effect and cause. The earliest type of such processes is what is called imitative magic, because it imitates the phenomena which it seeks to produce. Or, to put the case in another way, it attempts to set a cause in motion by mimicking its consequences. Fires are lighted to make the sun shine in season; water is sprinkled in a shower of drops with the object of inducing rain. In either case the operation is of a quasi-scientific character, and the operator endeavours to control a natural force by imitating its manifestations on a small scale. His mental attitude is so far removed from our own that it would be futile to attempt to analyse it, but it seems to involve the same kind of instinctive or semi-conscious association of ideas, instances of which may be observed among intelligent animals such as monkeys and dogs.

The ghost
theory

623. On the other hand, if "in the beginning at least", as Mr. Grant Allen affirms, "every god was nothing but an exceptionally powerful and friendly ghost—a ghost able to help, and from whose help great things may reasonably be expected" one can only wonder how people who desired to enlist his sympathy could have ventured to approach him in ways so inappropriate and disrespectful as those associated with magic. The greater the ghost the more striking is the incongruity of the ritual. Take the case of a strong chief like the Zulu Chaka, who exercised the most absolute power in the most arbitrary fashion and loomed so large in the consciousness of the tribe that he seemed to them none other than a god—how could they imagine that he who in life was so strong and so relentless should after death be at the beck and call of any medicine man who could mumble a formula correctly? Surely apotheosis can never have involved degradation. If there is any force in this line of argument it leads us to the following dilemma:—Either we must abandon the view that magic has everywhere preceded religion, or we must throw over the theory that every god commenced life as a magnified ghost. But there is much in modern research that tends to confirm the former opinion and it is hardly necessary to travel beyond the Vedas for proof of its validity. Vedic ritual is full of imitative or sympathetic magic which almost everywhere appears as a palpable survival from older modes of worship.

624. The ancestral theory on the other hand, or at any rate that extreme form of it with which we are now concerned, is less firmly established. No one of course disputes the existence of ancestor-worship, or denies that every Pantheon has been largely recruited from men, not always of the most respectable antecedents, who have fascinated the popular imagination by their doings in life or by the tragic or pathetic fashion of their death. India can show a motley crowd of such divinities. Priests and princesses, pious ascetics and successful dacoits, Indian soldiers of fortune and British men of action, bridegrooms who met their death on their wedding day and virgins who died unwed jostle each other in a fantastic Walpurgis dance where new performers are constantly joining in and old ones seldom go out. How modern some of these personages are may be seen from a few illustrations. In 1884 Keshab Chandra Sen, the leader of one of the numerous divisions of the Brahmo Samaj, narrowly escaped something closely resembling deification at the hands of a section of his disciples. A revelation was said to have been received enjoining that the chair used by him during his life should be set apart and kept sacred, and the Legal Member of the Viceroy's Council was invited to arbitrate in the matter. Sir Courtenay Ilbert discreetly refused "to deal with testimony of a kind inadmissible in a Court of Justice"; the parties to the dispute arrived at a compromise among themselves; and the apotheosis of the famous preacher remained incomplete. In Bombay a personage of a very different type has been promoted to divine

honours. Sivaji, the founder of the Maratha Confederacy, has a temple and image in one of the bastions of the fort at Malvan in the Ratnagiri district and is worshipped by the Gauda caste of fishermen. This seems to be a local cult, rather imperfectly developed, as there are no priests and no regular ritual. But within the last generation smaller men have attained even wider recognition. By the aid of railways and printing, the fame of a modern deity may travel a long way. Portraits of Yashvantrao, a subordinate revenue officer in Khandesh, who ruined himself by promiscuous alms-giving and sacrificed his official position to his reluctance to refuse the most impossible requests, are worshipped at the present day in thousands of devout house-holds. Far down in the south of India, I have come across cheap lithographs of a nameless Bombay ascetic, the Swami of Akalkot in Sholapur, who died about twenty years ago. In life the Swami seems to have been an irritable saint, for he is said to have pelted with stones any ill-advised person who asked questions about his name and antecedents. As he was reputed to be a Mutiny refugee he may have had substantial reasons for guarding his incognito. He is now revered from the Deccan to Cape Comorin as Dattatreya, a sort of composite incarnation of Brahma, Vishnu and Siva, and has a temple and monastery of his own.

625. Facts such as these lead one to surmise that some students of the modern science of religion have been so impressed by the undeniable facility with which historical personages are transformed into gods that they have rather overlooked the stages by which ancestor-worship has grown up, and have assumed that its latest form was also its earliest. Now in India at any rate we can trace in the funeral ceremonies, both of the Hindus and the Animists, survivals of ideas which have every appearance of going back to a far older phase of the religious instinct than that which leads to the deification of famous men. In the Vedic ritual, for example, as given by Gobhila, a prominent feature is the banquet offered to the souls of the dead—a rite which is met with among primitive people all over the world. Here is no suggestion that the souls go to heaven; they abide on or under the earth near the dwellings of men and wait for the living to supply them with food and clothes. These *pia munera* are offered at monthly intervals, but the motive which inspires them is plainly disclosed by the symbolical acts which accompany the offering. At the close of the ceremony the dead ancestors are bidden to depart to their ancient habitations deep under the earth; the foot-prints of the mourners are swept away with a branch lest the souls should track the living to their homes; every man shakes out the corners of his garments for fear an importunate spirit lurk somewhere in their folds; a stone or a clod of earth is set up to bar the soul's return, the funeral party step over running water which spirits cannot pass, and are careful not to look behind them on their way home. For the same reason the Mangars of Nepal obstruct the road leading from the grave with a barricade of thorns through which the soul, conceived of as a miniature man, very tender and fragile, is unable to force its way. The Kols, the Oraon, and the Bhumij are even now in the stage which appears in Vedic ritual as a mere survival. They do not *worship* their ancestors, in any intelligible sense of the word. That is to say, they do not pray to them, as the Vedic people did, for male offspring, length of days, abundant flocks and herds, and victory over their enemies. It is true that they appease them with food, but this they do, partly from a kindly regard for their welfare, but mainly to deter them from coming back and making themselves unpleasant. None of their gods can be shown to be deified ancestors, nor do any of them bear personal names. There is another point which deserves notice. Among all these tribes memorial stones are set up to mark the spots where the ashes of the headmen of the village have been buried. Some of these stones are rounded off at the top into the rudimentary semblance of a head. Yet the stones are not worshipped, nor are similar stones erected in honour of the powers which *are* worshipped. If these powers were once upon a time ancestors or chiefs of the tribe, how did they come to lose the stones which were their due? Thus the usages of both Aryans and Dravidians point to a conception of the souls of the dead as neither immortal nor divine, and as depending for their subsistence on human ministrations, which are rendered more in fear than in affection and are coloured throughout by the desire to deter these unwelcome guests from revisiting the abodes of the living. If these are the oldest

Growth of
Ancestor-
worship

ideas on the subject, as most authorities seem to hold, are we not justified in regarding with some suspicion the theory that everywhere and among all people the first step in the evolution of religion was the transformation of the *revenant* into a god?

The beliefs
of particular
tribes.

626. I have brought together in the Appendix to this Chapter a series of accounts of the religious ideas of the Animistic people of Bengal, with whom I have come more or less in contact. The selection includes the most vigorous of the Dravidian races, the compact tribes of Santáls, Mundas, Oraons and Hos. These tribes disclose no leanings towards Hinduism and it is recorded of the Manbhum Santáls that in the famine of 1866 they preferred wholesale starvation to the pollution of eating food prepared by Bráhman cooks. They possess a communal organization of their own, and they hate the Hindus, whom they know only as usurpers and landgrabbers, and whom they call by opprobrious names. The evidence of their beliefs and practices seems, so far as it goes, to lend some support to the hypothesis that the beginnings of religion are to be sought in the recognition of impersonal forces which men endeavour to coerce by magic; that personal gods, approached by prayer and sacrifice, are a later development; and that the deification of chiefs and ancestors is probably the latest stage of all—a stage reached, it may be, by means of the ambitious fiction which commenced by claiming certain gods as ancestors and ended by transforming some ancestors into gods.

Summary of
leading fea-
tures of Ani-
mism

627. We may now sum up the leading features of Animism in India. It conceives of man as passing through life surrounded by a ghostly company of powers, elements, tendencies, mostly impersonal in their character, shapeless phantasms of which no image can be made and no definite idea can be formed. Some of these have departments or spheres of influence of their own: one presides over cholera, another over small-pox, another over cattle disease; some dwell in rocks, others haunt trees, others again are associated with rivers, whirlpools, waterfalls or with strange pools hidden in the depths of the hills. All of them require to be diligently propitiated by reason of the ills which proceed from them, and usually the land of the village provides the ways and means for this propitiation. In the Ranchi District of Chota Nagpur there is a tentre called *Bhut-Kheta* which may be interpreted Devil's Acre, under which certain plots of land are set apart for the primitive priest whose duty it is to see that offerings are made in due season and that the villagers are protected from the malign influences of the shadowy powers who haunt the dark places of their immediate environment. The essence of all these practices is magic. If certain things are done decently and in order the powers of evil are rendered innocuous in a mechanical but infallible fashion. But the rites must be correctly performed, the magic formulæ must be accurately pronounced, or else the desired effect will not be produced. It is I think unfortunate that at the time when Dr. Tylor's great book on *Primitive Culture* was written, the essential distinction between magic and religion had not been clearly defined. Had this been so, had we then known all that Mr. Frazer has since told us, I venture to doubt whether the term Animism would ever have come into existence. Considerations of ritual and usage rather than of mythologies, traditions and cosmogonies would have led Dr. Tylor to the conclusion that the governing factor in these primitive religions is to be sought not in belief, not in any compact theory as to dreams, spirits or souls, but in the magical practices which enter into the daily life of semi-civilised men.

Relation be-
tween Ani-
mism and po-
pular Hindu-
ism.

628. Premising then that when we speak of Animism what we really mean is that exceedingly crude form of religion in which magic is the predominant element, we may go on to consider what is the relation between Animism and popular Hinduism. Several definitions of Hinduism are contained in the literature of the subject.

In his report on the Punjab Census of 1881 Sir Denzil Ibbetson described it as:—

"a hereditary sacerdotalism with Bráhmans for its Levites, the vitality of which is preserved by the social institution of caste, and which may include all shades and diversities of religion native to India, as distinct from the foreign importations of Christianity and Islam, and from the later outgrowths of Buddhism, more doubtfully of Sikhism and still more doubtfully of Jainism."

A few years later Babu Guru Prasad Sen said that Hinduism was "what the

Hindus or the major portion of them in a Hindu community do." Mr. Baines, who was Census Commissioner in 1891, proceeded by the method of exclusion and defined Hinduism as "the large residuum that is not Sikh, or Jain, or Buddhist, or professedly Animistic, or included in one of the foreign religions such as Islam, Mazdaism, Christianity or Hebraism." More recently the first living authority, Sir Alfred Lyall, roughly described it as "the religion of all the people who accept the Bráhmánic Scriptures." He went on to speak of it as "a tangled jungle of disorderly superstitions." Finally he called it "the collection of rites, worships, beliefs, traditions and mythologies that are sanctioned by the sacred books and ordinances of the Bráhmáns and are propagated by Bráhmánic teaching." The general accuracy of this newest definition is beyond dispute, but I venture to doubt whether it conveys to any one without Indian experience even an approximate idea of the elements out of which popular Hinduism has been evolved and of the conflicting notions which it has absorbed. From this point of view Hinduism may fairly be described as *Animism more or less transformed by philosophy* or, to condense the epigram still further, as *magic tempered by metaphysics*. The fact is that within the enormous range of beliefs and practices which are included in the term Hinduism there are comprised two entirely different sets of ideas, or, one may say, two widely different conceptions of the world and of life. At one end, at the lower end of the series is Animism, an essentially materialistic theory of things which seeks by means of magic to ward off or to forestall physical disasters, which looks no further than the world of sense, and seeks to make that as tolerable as the conditions will permit. At the other end is Pantheism combined with a system of transcendental metaphysics.

629. I will give two simple illustrations of the lower set of ideas. In a small sub-divisional court, where I used once to dispense what was accepted as justice in the surrounding jungles, there was tied to the railings which fenced off the seat of justice from the multitude a fragment of a tiger's skin. When members of certain tribes, of whom the Santals were a type, came into court to give evidence they were required to take a peculiar but most impressive oath, the use of which was, I believe, entirely illegal. Holding the tiger's skin in one hand the witness began by invoking the power of the Sun and Moon and after asseverating his intention to tell the truth he ended up by devoting himself to be devoured by the power of the tiger in case he should tell a lie. Some of the tribes who used to swear this weird oath have now been caught up in the wide-spread net of Hinduism and have already parted with their tribal-identity. Others again, like the Santals, are made of sterner stuff and still preserve an independent existence as compact and vigorous tribes. But the oath deserves remembrance as a vivid presentment of the order of ideas that prevail on the very outskirts of Hinduism. The reality of these ideas, the effectiveness of the sanction which they invoked, was sufficiently attested by the manifest reluctance of a mendacious witness to touch the magic skin, and by the zeal with which the court usher insisted upon his taking a firm grasp of it.

Illustrations
of Animistic
ideas

630. If we move a few grades further up in the social scale we find that worship of various kinds of Fetishes which the Portuguese seamen observed in West Africa in the middle of the 15th century, still holding its own almost from the top to the bottom of Hindu society. Here again it is ritual rather than the theories of the books that give the clue to the actual beliefs of the people. How tenacious these beliefs are and in what curiously modern forms they frequently express themselves, may be gathered from the following instance which I believe is now recorded for the first time. Every year when the Government of India moves from Simla to Calcutta, there go with it as orderlies or *chaprásis* a number of cultivators from the hills round about Simla who are employed to carry about despatch boxes and to attend upon the various grades of officials in that great bureaucracy. At the time of the spring equinox there is a festival called Sri Panchami, when it is incumbent on every religious-minded person to worship the implements or insignia of the vocation by which he lives. The soldier worships his sword; the cultivator his plough; the money lender his ledger; the Thags had a picturesque ritual for adoring the pickaxe with which they dug the graves of their victims; and, to take the most modern instance, the operatives in the jute mills near Calcutta bow down to the Glasgow

The Sri
Panchami
and Ani-
mism

made engines which drive their looms. Two years ago I asked one of the orderlies what worship he had done on this particular occasion and he was good enough to give me, knowing that I was interested in the subject, a minute description of the ritual observed. The ceremony took place on the flat roof of the huge pile of buildings which is occupied by the Secretariats of the Government of India. The worshippers, some thirty in number, engaged as their priest a Punjabi Bráhmaṇ who was employed in the same capacity as themselves. They took one of the large packing cases which are used to convey office records from Simla to Calcutta and draped its rough wood work with plantain leaves and branches of the sacred pipal tree. On this foundation they set up an office despatch box which served as a sort of altar; in the centre of the altar was placed as the principal fetish a common English glass inkpot with a screw top, and round this were arranged the various sorts of stationery in common use: penholders and pen-nibs, pencils red, blue, and black, pen-knives, ink-erasers, foolscap and letter-paper, envelopes, postage stamps, blotting paper, sealing wax, in short all the clerkly paraphernalia by which the Government of India carries on its work. The whole was festooned with abundant coils of red tape. To the fetish thus installed each one of the worshippers presented with reverential obeisance grains of rice, turmeric, spices, pepper and other fruits of the earth together with the more substantial offering of nine copper pice or farthings—"numero deus impare gaudet"—the perquisite of the officiating priest. The Bráhmaṇ then recited various cabalistic formulæ, supposed to be texts from the Vedas, of which neither he nor the worshippers understood a single word. When the ceremony was over the worshippers attacked a vast mass of sweetmeats which had been purchased by a subscription of a rupee a head. The Bráhmaṇ ate as much as he could and they finished the rest. I asked my informant, who is a small land-owner in one of the Hill States near Simla, what he meant by worshipping an imported inkpot when he ought to have worshipped a country-made plough. He admitted the anomaly, but justified it by observing that after all he drew pay from the Department; that the inkpot was the emblem of the Government; and that he had left his plough in the hills. These are the lower aspects of Hinduism, survivals of magical observances which show no signs of falling into disuse.

Sources of
Animistic
usages

631. The Animistic usages of which we find such abundant traces in Hinduism appear indeed to have passed into the religion from two different sources. Some are derived from the Vedic Aryans themselves, others from the Dravidian races who have been absorbed into Hinduism. As to the first, Bergaigne has shown in his treatise on Vedic religion that the Vedic sacrifice which is still performed by the more orthodox Hindus in various parts of India is nothing more nor less than an imitation of certain celestial phenomena.* It is in other words merely sympathetic magic directed in the first instance to securing the material benefits of sunshine and rain in their appointed seasons. The Vedas themselves, therefore, are one source of the manifold Animistic practices which may now be traced all through popular Hinduism. They have contributed not only the imitative type of sacrifice but also the belief, no less magical in its character, that by the force of penance and ascetic abnegation man may shake the distant seat of the gods and compel them to submit themselves to his will. It would be fruitless to attempt to distinguish the two streams of magical usage—the Vedic and the Animistic. They are of mixed parentage like the people who observe them, partly Indo-Aryan and partly Dravidian.

Pantheism

632. At the other end of the scale, in the higher regions of Hinduism the dominant idea is "what is called Pantheism; that is the doctrine that all the countless deities, and all the great forces and operations of nature, such as the wind, the rivers, the earthquakes, the pestilences, are merely direct manifestations of the all-pervading divine energy which shows itself in numberless forms and manners."† Of this doctrine the most eloquent and the most effective description is that given in the Sixth book of the *Æneid*—a passage so transfused with Indian thought that it is hardly possible to doubt that its leading ideas are of Indian descent though Virgil may have

* *La Religion Védique* I, 125. See also Oldenberg, *Die Religion Des Veda*

† Sir Alfred Lyall, *Hinduism Religious Systems of the World*, page 113

derived them from Ennius and he again from the Pythagoreans of Magna Græcia.

Principio cælum ac terras camposque liquentes
Lucentemque globum Lunæ Titanique astra
Spiritus intus alit, totamque infusa per artus
Mens agitat molem et magno se corpore miscet
Inde hominum pecudumque genus vitæque volantum
Et quæ marmoreo fert monstra sub æquore pontus.

Here we seem at first sight to have travelled very far from the chaos of impersonal terrors which forms the stuff of which primitive religion is made. Yet it is easier to trace Pantheism to the gradual consolidation of the multifarious forces of Animism into one philosophic abstraction than to divine how a host of personal gods could have been stripped of their individual attributes and merged in a sexless and characterless world-soul. In a word Animism seems to lead naturally to Pantheism; while the logical outcome of Polytheism is Monotheism. The former process has completed itself in India; the latter may be yet to come.

633. Pantheism in India is everywhere intimately associated with the doctrine of metempsychosis. The origin of this belief, deeply engrained as it is in all ranks of Indian society, is wholly uncertain. Professor Macdonell tells us that "the Rig Veda contains no traces of it beyond the couple of passages in the last book which speak of the soul of a dead man as going to the waters or spirits" and he surmises that the Aryan settlers may have received the first impulse in this direction from the aboriginal inhabitants of India. To any Indian official who has served in a district where the belief in witchcraft is prevalent, the conjecture appears a peculiarly happy one, for in the course of exercising his ordinary magisterial functions, he will have come across abundant evidence of the wide-spread conviction among savage people, not only that the souls of the dead may pass into animals and trees, but that living people may undergo a similar temporary transformation. But if they borrowed transmigration from the Dravidian inhabitants of India the Indo-Aryans lent to it a moral significance of which no trace is to be found among the Animists. They supplemented the idea of transmigration by the theory of self-acting retribution which is known as *Karma*. According to this doctrine every action, good or evil, that a man does in the course of his life is forthwith automatically recorded for or against him as the case may be. On this theory there is no repentance, no forgiveness of sins, no absolution. That which is done carries with it its inevitable consequences through the long succession of lives which awaits the individual soul before it can attain the Pantheistic form of salvation and become absorbed in the world-essence from which it originally emanated. As the wheel of existence goes on turning and man, who is bound to it, passes from one life to another, at the close of each a balance is struck which determines his condition in the life that follows. If the balance is against him he descends to a lower grade, if it is in his favour he moves up higher and ultimately when the system of self-working retribution has run its course, he may attain to the final goal of the negation of individual existence. As Virgil puts it, in a phrase which has puzzled most of his commentators, 'Quisque suos patimur Manes'. In the light of Indian speculation the meaning of the passage becomes clear. It embodies one of the leading ideas of *Karma*, that man through his actions is master of his fate. But the context discloses no trace of the characteristic Indian development that destiny is worked out by means of countless transmigrations. That doctrine seems at first sight to possess a fine moral flavour and to harmonise with the teaching of the Greek dramatist δράσαντι παθεῖν. Unfortunately for the ethical aspects of *Karma* consciousness does not continue through the whole series of lives, at the close of each life a curtain of forgetfulness descends and the Bráhmaṇ whose sins have degraded him to the position of an over-taxed animal has no remembrance of the high state from which he has fallen. The philosophic sinner, therefore, may console himself with the thought that, although undoubtedly a reckoning awaits him, he will have become somebody else by the time the bill has to be paid.

Between these extremes of practical magic at the one end and transcendental metaphysics at the other, there is room for every form of belief

and practice that it is possible for the human imagination to conceive. Worship of elements, of natural features and forces, of deified men, ascetics, animals, of powers of life, organs of sex, weapons, primitive implements, modern machinery; sects which enjoin the sternest forms of asceticism; sects which revel in promiscuous debauchery; sects which devote themselves to hypnotic meditation; sects which practise the most revolting form of cannibalism—all of these are included in Hinduism and each finds some order of intellect or sentiment to which it appeals. And through all this bewildering variety of creeds there is traceable the influence of a pervading pessimism, of the conviction that life, and more especially the prospect of a series of lives, is the heaviest of all burdens that can be laid upon man. The one ideal is to obtain release from the ever-turning wheel of conscious existence and to sink individuality in the impersonal spirit of the world.

Practical
test of
Hinduism.

634 It remains to say what is the practical criterion by means of which Hinduism may be distinguished from the other religions indigenous to India. The most obvious characteristics of the ordinary Hindu are his acceptance of the Bráhmanical supremacy and of the caste system, and when it is a question whether a member of one of the Animistic tribes has or has not entered the fold of Hinduism, this seems the proper test to apply. On the other hand there are various offshoots from orthodox Hinduism, the distinguishing feature of which, in their earlier history at least, is the obliteration of caste distinctions and the rejection of the Bráhmanical hierarchy. In their case the question seems to hinge on other considerations. It is doubtful if Buddhism, and still more so if Jainism and Sikhism, all of which are commonly recognized as distinct religions, ever differed from Hinduism to a greater extent than did the tenets of the earlier followers of Chaitanya in Bengal or those of the Lingáyats in Bombay. The Jains, though they have their own spiritual guides, have never ceased, as the Lingáyats have done, to employ Bráhmans in their religious ceremonies. The cardinal religious doctrines of the Sikhs are enshrined in the teaching of Bába Nának, but the severance from Hinduism lies, not in the acceptance of Nának's theologies, for the majority of the primitive Nánaksháhís consider themselves, and are regarded by their neighbours as, Hindus, but in the open rejection of ordinary Hindu scruples inculcated in the ordinances of Guru Govind. The impure doctrines of the Kartábhajás of Bengal differ more from Hinduism than do any of the recognized indigenous religions, but those who profess them are still regarded merely as Hindu sectaries. The same is the case with certain groups of ascetics, including the filth-eating Aghoris, who have little or no connection with Hinduism beyond the circumstance that they sprang originally from its ranks. The question whether any particular tenets professed by persons of Hindu origin should be regarded as constituting a separate religion or merely as forming a Hindu sect seems, therefore, to depend less on the character of the tenets than on the external circumstances attending their development. Considerations of their history and past political importance have led to the elevation of Buddhism, Jainism and Sikhism to the rank of independent religions while the numerous other schismatic bodies are held to be only sects.

Hindu Sects

635. Of such sects there is a legion. They fall into two main categories, those who advocate the rival claims of one or other of the great Vedic deities or of Pauránik accretions to the orthodox pantheon, such as Durga, and those who either neglect or deny the regular deities. To the former class belong the Saivas or Smárthas, Sáktas, Vaishnavas, Sauras, etc., and to the latter the followers of Kabir, Nának, Darya Dás, and Seonáráyan, the Satnámis, the Páñchpiriyas and many others. The causes of schism have varied from time to time according to circumstances. The Sáktas, for example, owe their origin to the Tántrik developments which infected both Buddhism and Hinduism, chiefly in North-Eastern India, about the seventh century of our era. Their cult is described as follows in the Bengal Census Report:—

“Sáktism is based on the worship of the active producing principle (Prákriti) as manifested in one or other of the goddess wives of Siva (Durga, Kali, Párvati), the female energy, or Sakti, of the primordial male, Purusha or Siva. In this cult the various forces of nature are deified under separate personalities which are known as the divine mothers or Mátrigan. The ritual to be observed, the sacrifices to be offered, and the *mantras*, or magic texts, to be uttered, in order to secure the efficacy of the worship and to procure the fulfilment of the worshipper's desire, are laid down in a series of religious writings known as Tantras. The cult is supposed to have originated in East Bengal or Assam about the fifth century. Káli is said to be the

same as Durgá, but she can assume any number of forms at the same time. The characteristic of Durgá is beneficence, while Káli is terrific and bloodthirsty. In the Káliká Purán the immolation of human beings is recommended and numerous animals are enumerated as suitable for sacrifice. At the present time pigeons, goats and, more rarely, buffaloes, are the usual victims at the shrine of the goddess. The ceremony commences with the adoration of the sacrificial axe, various *mantras* are recited and the animal is then decapitated at one stroke. As soon as the head falls to the ground, the votaries rush forward and smear their foreheads with the blood of the victim. The great occasion for these sacrifices is during the three days of the Durgá Pujá. The opposition between Sáktaism and Vedic Hinduism is expressly stated in the Maháurvána Tantra where it is said that the *mantras* contained in the Vedas are now devoid of all energy and resemble snakes deprived of their venom. In the Satya and other ages they were effective but in the Kali Yuga they are, as it were, dead."

636. The Vaishnavism inculcated in Bengal by Chaitanya clearly reflects the influence of Buddhism, and the main object of the founder seems to have been to attract those who were till lately Buddhists and who would not be likely to accept the grosser form of Hinduism then prevalent in Bengal and, in particular, the prominence which it gave to the social distinctions implied in the word "caste." He, therefore, ignored caste and enjoined great regard for animal life, forbade sacrifices of all kinds and taught that the true road to salvation lay in *bhakti* or fervent devotion to God. The rejection of caste is, however, not due solely to the influence of Buddhism, but has its origin deep in human nature and in the repugnance of the lower castes to the degraded position to which they are relegated, which at all times seems to have ensured a response to any reformer who would make the equality of all men a leading feature of his propaganda. It was proclaimed not only by Chaitanya, but also by Basappa of Kalyán, the reputed founder of the Lingáyat sect, by Ghási Das who established the Satnámis, by Guru Govind and many others. The repudiation of the Bráhmanical supremacy may have seemed less difficult where the people were, or had recently been, in contact with Buddhist doctrine, but in later times the influence of Islám was no doubt as great or even greater. The example of the latter religion, however, seems to have made itself most strongly felt in the revolt against polytheism and idolatry which distinguishes so many of the religious movements of more recent times, such as those inaugurated by Kabír, Dádú, and Nának; these have usually a pronounced monotheistic tendency, coupled with the condemnation of idols and, in some cases, the openly professed object of bringing the Hindus and Muhammadans into the same fold.*

Influence of
Buddhism
and Islám

637. One marked peculiarity of Hindu sects is their tendency to relapse into orthodoxy, as soon as the zeal which inspired their earlier adherents has grown cold. As has often been remarked, the religious bias of the native of this country is not in any way exclusive, and the fact that a man personally favours one particular deity does not mean that the rest are not equally deserving in their way, and he views their adoration by others, not with animosity, but with equanimity and even approval. It follows that when his first ardour for his new sect has been relaxed, he gradually finds himself, first watching the processions connected with the worship of other gods, then joining in them, and at last taking an active part in the ceremonies. The Mahant of the temple of Bodh Gaya is a Saiva ascetic, but the worship conducted there is that of Vishnu, who is represented by an image of Buddha. Even the Bráhmans are entirely free from the *odium theologicum*, so long as their pockets do not suffer, and the most important shrines of the Vaishnavas of Bengal are in the keeping of Bráhmans who are themselves strict Sákta.

Tendency to
relapse into
orthodoxy

It is only where a movement is social rather than religious that it retains its vitality for any length of time, but even in such cases, there is often a tendency to gradually conform to orthodox usage, and the better class of Vaishnavas in Bengal and the Lingáyats in Bombay no longer disregard caste and the restrictions which caste connotes. The Satnámis, who are usually Chamárs, on the other hand, seem to retain their distinctive character and so also do the Kabirpanthis† and the followers of the strange Panchpuriya cult. With a few exceptions, however, the adherents of comparatively modern sects alone have clear ideas as to the distinction between themselves and their neighbours in the matter of religious belief and "to a large majority of Hindus sect

* In Bombay, according to the census, the professed followers of Kabír include 8,000 Hindus and 1,300 Muhammadans. His teaching was avowedly syncretic, and it is commonly said that at his death the Hindus and Muhammadans both claimed his body, the former wishing to cremate, and the latter to bury it.

† In the Central Provinces 84 per cent. of the Pankas are followers of Kabír.

has very little meaning"* Speaking of the three main sects in Baroda Mr. Dalal says: "The followers of neither are exclusive; they pay homage to all the deities, but are bound more to the special deity of their cult." In Bihar:—

"The dividing line between Śāktas and Vaiṣṇavas is less clearly defined, and, except in the case of certain ascetics, the worship of one God is not necessarily exclusive of that of another, as it is in Bengal proper, where a strict Vaiṣṇava will not even name Kālī and Durgā, or the leaves of the Bel tree, which are largely used in connection with the religious ceremonies of the Śāktas. The reason seems to be that Bihar was never so deeply infected as Bengal with the worst forms of Śākta worship, and that the Vaiṣṇava revival of Chaitanya, which represented a revulsion from Saktism, never spread thither."

The Census
Statistics of
sect

638. The collection of information regarding sect at the census was optional with Local Governments. For the reasons given above it was not attempted in Bengal or Madras, but in several of the other provinces the compilation of the return was undertaken. The results, however, are not very conclusive. In Assam and Baroda sect seems to have been more or less fully returned, but in Assam Mr Allen doubts if much reliance can be placed on the results. In the Central Provinces less than 1 Hindu in 9 named any sect, in the United Provinces less than 1 in 5 and in Bombay less than 1 in 4. The figures cannot, therefore, be used to trace the general sectarian distribution of the people, but they have nevertheless a distinct value as drawing attention to the various forms of religious belief which exist, and they also, in the case of recent or specially vigorous sects, afford some indication of the actual number of their followers. They clearly bear out the truth of what has been stated above as to the want of recognition, on the part of the people themselves, of the conventional sectarian distinctions and in the United Provinces only 1 Hindu in 11 declared himself to be a Śaiva or Vaiṣṇava by sect. It is probable that even these had no clear idea as to the distinctive tenets connoted by the above names, beyond the vague theory that a Śaiva may eat meat and a Vaiṣṇava may not, and that many of the persons thus entered owe it to the fact that the sects in question were given in the instructions as illustrations of the

ASSAM			
Mahāpurusha	.	.	485,653
CENTRAL PROVINCES			
Kabirpanthi	493,393	Satnāmi	389,599
Nānakpanthi	12,800		
UNITED PROVINCES			
Pāñchpūya	1,760,363	Ramanandi	1,317,580
Lingayat	1,065,083	Bishnoi	289,407
Nānakshāhi	241,316	Kabirpanthi	215,771
Pasupat	88,242	Vallabhacharya	87,178
Satnāmi	73,917	Radhavallabhi	48,694
Gorakpanthi	32,244	Nimbarak	18,964
Rādhāswāmi	15,375	Sivanaraini	6,599
BOMBAY			
Lingayat	870,729	Nānakshāhi	157,577
Daryapanthi	112,655	Ramanand	97,405
Vallabhachari	80,531	Swaminarayan	42,400
Maulbhav	19,430	Kabirpanthi	9,407
CENTRAL INDIA AGENCY			
Ramanandi	155,730	Kabirpanthi	124,600
Bharon	67,191	Ganeshji	64,078
Pretpujak	38,301	Lalbegi	21,786
Bhairava	20,776	Rudas	14,814
Narsinghi	8,613		

kind of entry required, and they were, therefore, often copied in the schedules merely because the enumerators and enumerated were both at a loss to think of anything more appropriate. In view of the partial character of the return and of the impossibility of giving a comprehensive review of so vast a subject within the limits of a Census Report it is not proposed to discuss it here. The figures for some of the more important of the sects returned, other than the conventional divisions of Śākta, Vaiṣṇava,† etc., are noted in the margin, and, if further details are required, reference can be made to the various provincial reports, many of which contain much interesting information on the subject.‡

639. The forms of worship vary and sects are numerous, but the actual religious ideas which underlie the outward ceremonial are much more uniform than might be supposed. In belief, though seldom perhaps in practice, most Hindus

* Madras Census Report, 1891, paragraph 113

† In the United Provinces Mr. Burn shows that the alleged number of Ramanandis has risen from 421,433 to nearly three times this number, merely because it was the first of a few sects given as examples in the rules.

‡ Sir Denzil Ibbetson's account of the religions of the Punjab in the Provincial Census Report of 1881 is well known, and Mr. MacLagan's Report on the Census of 1891 in the same province gives an admirable review of a number of the leading sects, which has been supplemented by Mr. Rose on the present occasion. Mr. Russell in the Central Provinces deals at some length with the Kabirpanthis, Satnāmis and other sects which are locally numerous. Mr. Enthoven in Bombay gives a full account of the Lingayats, and Mr. Dalal in Baroda of the various religious divisions found in Gujarāt. The Bengal Report contains an account of the Kartābhajās, Śeo Nānakānis and other sects, that of the Rādhāswāmis is discussed in the Report for the United Provinces, that of the Dādūpanthis in the Rajputana Report, and so on.

are henotheistic, and recognize the existence of one Supreme God (Paramesvar). Their other deities fall into two categories, major and minor, and those of the latter class are regarded as the ones which are of most importance from a personal point of view. They have an implicit belief in the doctrine of *Karma*, or the theory that a man's future life depends on his actions in his present state of existence. The belief in metempsychosis though general, is less universal, and some of the lower castes have an idea that when they die they will go direct to heaven (*Svarga*) or hell (*Narak*) without the trammels of endless re-births which the more orthodox sections believe in. Mr Risley asked the Census Superintendents to make special enquiries into the actual working beliefs of the ordinary man, his standards of right and wrong and his ideas as to what will happen to him if he disregards them. These matters have been discussed at more or less length in several of the Census Reports and many facts of interest have been recorded, but, in the present connection, it will perhaps suffice to quote the following from Mr. Burn's notes on the subject.—

"The general result of my enquiries is that the great majority of Hindus have a firm belief in one Supreme God, called Bhagwan, Parameshwar, Ishwar or Narain. Mr. Baillie made some enquiries which showed that this involved a clear idea of a single personal God, but I am inclined to think that this is not limited to the more intelligent, but is distinctly characteristic of Hindus as a whole. The next question is the extent to which this belief in a supreme being is affected by the belief in other deities, and also what the nature of the latter is. Professor Monier Williams divides these into two classes, the tutelary gods and demons, and defines the former as those that give deliverance from the calamities, actual and potential, believed to be due to demons. This division, while it corresponds closely to the facts, is based on the qualities supposed to be possessed by the deities, but their nature can be better indicated by quoting the headings of the chapters in Mr. Crooke's book on the Popular Religion referred to above, viz., (1) the godlings of Nature, (2) the heroic and village godlings, (3) the godlings of Disease, (4) the worship of the Sainted Dead, (5) the worship of the Malevolent Dead, (6) the Evil Eye and the scaring of Ghosts, (7) Tree and Serpent worship, (8) Totemism and Fetichism, (9) Animal worship, and (10) the Black Art. As pointed out by Mr. Crooke these are all known as *Devata* or godlings, not *Deva* or Gods. An orderly into whose belief I was enquiring described the relation between Parameshwar and the *Devata* as the relation between an official and his orderlies, and another popular simile, often used, is that of the *Sirkar* or Government, and the *Hakimzila* or district officer. A very clear distinction is thus made, and there is no question of any conflict between the one Supreme God Parameshwar, and the countless godlings. The former is responsible for the existence of everybody and everything, but is too exalted to be troubled about ordinary every-day affairs. On the other hand, the tutelary godlings (as defined above) should be appealed to for help in worldly concerns, and the demons must be propitiated to prevent things from going wrong. These considerations lead to the question what worship the average man performs. In general it may be said that the only regular daily worship consists in pouring out a little water in the morning, on first arising, in honour of the Sun, and perhaps in the repeating of the name of Parameshwar, or one of the incarnations of Vishnu (especially Rama) in the morning and evening. Apart from this, the principal form of the worship of Parameshwar is the hiring of a Brahman to recite the *Sat Narain Katha*—an account of the manifestation of God to certain persons who obtained spiritual prosperity by worshipping Him. The absence of regular worship is apt to create an impression that the ordinary Hindus are irreligious, which is entirely mistaken. The fact is that Hinduism has carried to an extreme the doctrine, by no means unknown to other religions, that the principal conductor of religious ceremonies should be a selected individual. Manu lays down that only Bráhmans should teach the Vedas, and while other religions ordain individuals who have been trained for the purpose, Hinduism recognizes a hereditary priesthood. Having regard to this principle, and also to the fact that any worship beyond the simplest rites costs money, it is clear that one great obstacle in the way of further worship by the masses is the inability to afford it. Thus the poor man, however much he wishes it, can only have the *Sat Narain Katha* recited once a year, while his richer brother will have it once a month. And apart from the special reverence paid to Bráhmans on account of their birth, and the extraordinary efficacy attributed to their religious ministrations, there is a possible danger to the ordinary man who attempts to perform his own religious ministrations. One man who declared that the Pachpriya were his tutelary deities, told me that the worship of Mahadeo was especially useful, as he was always at hand to aid his devotees, but everybody could not undertake it because if any mistakes were made in the repetition of hymns evil would happen. As an example he quoted the case of a friend of his who omitted something one day, and was nearly killed by a large stone which fell out of the wall of his house. Similar beliefs are found in the case of Islam and Christianity. But while, for a few godlings, daily worship is necessary, for the majority it is only required on certain days in the year, or in times of distress, or to obtain the fulfilment of specific prayers. It must not be forgotten, however, that to the Hindu religion includes matters which, to other people, are merely social concerns, and while he has no idea of congregational worship such as is usual for example in Christianity or Islam, ritual enters into his daily life probably to a greater extent than into that of a Christian or Musalman. The code of morality of the ordinary Hindu is much the same as that of most civilised nations, though it is nowhere

(1) United Provinces

reduced to a code. He knows that it is wrong to commit murder, adultery, theft and perjury, or to covet, and he honours his parents, in the case of the father at any rate to a degree exceeding the customs of most nations, which have no ceremony resembling that of *Śrāddhā*. The influence of caste is, however, of the greatest importance here, and some enquirers have expressed their opinion that the principal sanction attaching to a breach of morality is the fear of caste penalties rather than the dread of divine punishment, and there are many facts which go to support this view. Almost any moral law may be broken to save the life of either a Brāhman or a cow. An extreme example of the effect of caste principles may be seen in some of the lowest castes, where adultery is only condemned and visited with punishment when committed with a person of different caste. In the case of perjury, the offence may be committed, without public reprobation, on behalf of a caste-fellow, or even an inhabitant of the same village. Even in the case of the higher forms of Hinduism there are discussions on the occasions on which lies may be told which recall the arguments of the casuists. There can, however, be little doubt that there is a further sanction, though it would be difficult to apportion the degrees of importance attached by the average man respectively to fear of the criminal law, caste punishment and this further sanction. It has been stated by some writers that the ordinary Hindu peasant has practically no belief in the doctrine of transmigration but this is contradicted by my own experience, and by all the reports that have been supplied to me. I believe that the doctrine of *Karma* is one of the firmest beliefs of all classes of Hindus, and that the fear that a man shall reap as he has sown is an appreciable element in the average morality. If the ordinary man is asked whether a specific act is right or wrong, he will answer without hesitation, and as noted above, his decision will usually coincide with the opinions held by adherents of other religions. If asked why a certain act is wrong, a few men will say that it is forbidden by the *Shastras*, but the reply of the majority will be to the effect that this is a matter of common knowledge. If the enquiry is extended to the effect of wrong-doing, most Hindus have a fairly clear idea that it is displeasing to Parameshwar, and that the wrong-doer must suffer for it, possibly in his present existence, but certainly in his future life or lives. It is, however, doubtful whether these two consequences are in any way connected, because the operation of the law of *Karma* appears to be regarded as so certain that the specific condemnation by Parameshwar in each case is hardly required. Similarly the idea of forgiveness is absolutely wanting, evil done may be outweighed by meritorious deeds so far as to ensure a better existence in the future, but it is not effaced, and must be atoned for. It has been said that the theory of transmigration is illogical because it does not follow from it that the soul remembers its previous existences, but such a consciousness is recognized in the case of great ascetics, and the fact remains that, according to the theory, a person born in some degraded position knows that the reason for this is his wrong-doing in a previous existence. There is a popular belief in some places that when a man has died the nature of his next existence can be ascertained by placing ashes from a potter's kiln in a shallow vessel and carefully smoothing them. Next morning the ashes will be found marked with human footprints if the soul of the dead man is to be reborn as a human being, with claws if as a bird, wavy lines if as a tree, and so on. A man and his wife bathe in the Ganges with their clothes tied together, to ensure their being married to one another in a future existence. It appears to me not impossible that the belief in the effects of *Karma* has had a considerable influence on the growth of rigidity in caste regulations. There is an important difference between the teaching of theoretical Hinduism and that of the popular religion in regard to the ideas of Heaven and Hell. In the former there are transitory stages of existence in the chain of transmigration, while in the latter, it will not infrequently be found that there is an idea that the soul, when sufficiently purified, goes to dwell in Heaven for ever. As far as can be ascertained those who believe this regard heaven as a place where the soul will dwell, surrounded by material comforts, in perfect happiness. But there is no idea of absorption in the deity whose place is far above, and the orthodox view of recurring cycles of existence and non-existence is not held by the classes of society under discussion."

(2) Madras

610. In the south of India the influence of Animism is stronger as was shown by Mr. Stuart in his Report on the Census of Madras in 1891:—

"In the first place they (the Hindus) give a nominal allegiance to some one or more of the orthodox gods, the incarnations of Vishnu or Shiva or their spouses, Lakshmi and Pārvatī, or their offspring, Ganēsha, Subramaniam, etc.; and they attend the temples of these gods at times of festival and present offerings. But the ordinary villager thinks that these august-deities concern themselves but little with his affairs, and his real worship is paid to Māriamman, the dread goddess of small-pox and cholera, and to the special goddess of his village. Misfortunes are the work of evil spirits or devils, and his religious efforts are directed to their propitiation. * * *

"Many diseases, especially severe or obstinate maladies, are ascribed to 'possession' by devils; hysteria is always attributed to this source. These devils also cause cattle disease, failure of crops, accidents, and in fact misfortunes generally. They are believed to beat people, to throw stones on houses, to fire the thatch. Sometimes they content themselves with frightening the timid. 'In short the demons do much evil, but no good. They often cause terror, but never bestow benefits, or evince any affection for their votaries. They must be placated by sacrifice, because they are so mischievous, but there is no use in supplicating their favour. If, in any case, the hope of obtaining a benefit seem to be their votary's motive in worshipping them, further inquiry proves that it is under the supposition that the demon's malignity stands in the way of what would otherwise be obtained as a matter of course.'"

* On Demonolatry in Southern India, by the late Bishop Caldwell, p. 100.

"When the 'doctor' attending a sick person finds that the malady is unknown to him or will not yield to his remedies, he certifies that it is a case of possession, and the exorciser is then called in to expel the demon by his charms and incantations. After expulsion a sacrifice of a fowl or a goat is frequently made to the devil to placate him, or as a species of compensation for disturbance. From time to time, too, sacrifices are made to the demons to induce them to abstain from inflicting calamities or to remove evils which they have already inflicted.

"The earliest form of the belief in the spirits of the dead was that they were all evil spirits, but it is easy to understand how the idea arose that some of the souls of the departed became good spirits, willing to ward off evil, provided they received due attention. Hence we get the tutelar deities, who seem to be merely deified mortals, and in some cases it is difficult to draw the line between these gods and the demons or devils. The majority of these tutelar deities are females and are called 'Ammans' or mothers. The local deity of every village (the *Grāmadēvata*) is always one of these Ammans; it is to her that the villagers look for protection from the malevolence of the demons, those who are believed to be 'possessed' are sent to her temple; and it is usually her priest who exorcises the devil.

"Another element in the religion of the people which calls for brief notice is serpent worship. According to Fergusson serpent worship is foreign to the Dravidian races, but it is difficult, on this supposition, to account for its wide prevalence in Southern India at the present day. It is especially common in South Canara and Malabar, and in the latter district a 'poison shrine' or 'snake shrine,' as it is variously called, is to be seen in the garden of every respectable Hindu, while in the former is found one of the most famous serpent temples in India.

641. In the above extracts, reference is made to the various minor deities worshipped by Hindus. This is a vast subject which has been dealt with by Mr. Crooke in his book on the Popular Religion and Folklore of Northern India and in various provincial Census Reports,* but which cannot conveniently be entered upon here. It may be noted, however, that the character of these minor deities who are in many, if not in most, cases of non-Aryan origin, varies in different parts of India and even in different parts of the same province. Thus in Bengal:—

"It may be pointed out in conclusion that while the earth, sun and moon, and certain large rivers, are worshipped throughout the province, many of the other objects of adoration are revered only in certain localities. The veneration of deified heroes is more or less confined to Bihar, while snake worship prevails mainly in West, and parts of North, Bengal. The tribes of the Chota Nagpur Plateau and some of the Himalayan tribes give the spirits of the mountains a high place in their pantheon, while in the greater part of Bengal proper the old aboriginal godlings have, as a rule, been taken over by the Brahmans as forms of Kali and other orthodox deities, and have thus lost their identity. It is only in the extreme north and east that deities who are admittedly non-Hindu still command the worship of men, while in the west, Buddhism ekes out an obscure and precarious existence."

It may be added that the extent to which these minor deities are worshipped is to a great extent a matter of social position. Being, as they chiefly are, of aboriginal origin, they enter most largely into the religion of the lower castes, who are descended in the main from the aborigines, and least so into that of the higher castes, in whose veins the infusion of Aryan blood is strongest.

642. We have seen that after the advent of the Muhammadans religious reformers were greatly influenced by the monotheistic ideas so strongly inculcated by that religion. In more recent times two sects have been formed the founders of which clearly drew their inspiration from western thought, the Brahmo Samáj founded in Bengal by a Bráhmaṇ, Rájá Ram Mohan Roy, who died in England in 1833, and the Aryá Samáj founded by Dayanand Saraswati of Kathiawar, also a Bráhmaṇ, whose missionary work commenced in the United Provinces about 40 years ago.

643. According to the Bengal Census Report the Brahmo Samáj:—

The Brahmo Samáj.

"Is divided into three sections, the *Ādi* or 'original,' the *Nababidhán* or 'New Dispensation' and the *Sádháran* or 'common' Samáj, but all alike believe in the unity of the Godhead, the brotherhood of man, and direct communion with God in spirit without the intervention of any mediator. The differences which exist are ritualistic and social rather than religious. The *Ādi* Samáj, or oldest section, is also the most conservative. While discarding all idolatious forms, it follows as closely as possible the rites of Hinduism, and draws its inspiration solely from the religious books of the Hindus, especially the Upanishads, and not from the Bible or Korán. It has only once allowed a non-Bráhmaṇ to officiate as its minister. Inter-caste marriages are not allowed, and a considerable agitation was raised when one of its Bráhmaṇ members recently married the daughter of the Mahárája of Kuch Bihar. In other respects the restrictions of the

* E.g. Punjab Census Report for 1881, pages 118—119, and the following Reports on the present Census, viz., Baroda, pages 124—131, Bengal, pages 186—201, Central India, pages 73—80, Cochin, pages 23—28.

caste system sit lightly on the members of the Samáj, but they are particular to style themselves Hindus, and before the census of 1891 they submitted a memorial intimating their desire to be entered as Theistic Hindus and not as Brahmos. The leader of this section is Maharshi Debendra Náth Tagore

"The Nababidhán Samáj, or Church of the New Dispensation, also known as the Bhárat-barshuya Brahmo Samáj, was founded by Keshab Chandra Sen. It is more eclectic and has assimilated what it considers just, not only in the Shástras, but also in the religious teachings of Christianity, Buddhism and Islám. The present leader is Babu Pratáp Chandra Mozoomdar who, like Keshab, is a Baidya by caste. Inter-caste marriages, though not greatly disapproved of, are rare.* It is not clear how members of this communion would return themselves at the census. Probably many of them would prefer to call themselves Hindus, unless their caste happened to be a humble one, in which case they might describe themselves as Brahmos.

"The Sádharán Brahmo Samáj is the most advanced of these churches. It relies, like the Nababidhán, on the teachings of all religious systems, but is more uncompromising in its disapproval of ritual and set forms of worship. It rejects altogether the system of caste. It is also strongly opposed to the *parda* system, gives its women a liberal education and allows them an equal voice in all matters of church government. It freely permits inter-caste marriages, not only in theory but in practice. Thus, a covenanted civilian who is a Bráhmaṇ, has married the daughter of a Káyasth, and the daughter of a well-known retired civilian of the Kayasth caste is married to a civilian of the Baidya caste. There are numerous similar cases. The members of the Sádharán Brahmo Samáj, from being a religious sect, are thus gradually becoming a separate caste, recruited from a variety of different sources, but mainly, from the ranks of the Bráhmaṇs, Baidyas and Káyasths. Other castes of similar origin are by no means unknown in Bengal, but the Brahmos are far more select than their earlier prototypes.

"This section is uncompromising in its rejection of all the essentials of what is commonly regarded as Hinduism, and most of its members doubtless described themselves as Brahmos in the census schedules. It may, I think, be assumed that the majority of the 3,171 persons returned as Brahmos were members of the Sádharán Brahmo Samáj. The number is small but growing. In 1891 only 2,546 persons were so returned and in 1881 only 788. In spite of its numerical insignificance the community is very influential and its numbers amongst its members some of the best known men in the country. Most Indian gentlemen who have received an European education join this community, not so much perhaps on account of religious conviction as because of the freedom which it allows to them from the irksome trammels of caste and from the necessity of undergoing a ceremony of purification."

The Ārya
Samáj

644. Mr. Burn describes as follows the fundamental principles of belief and social aims of the Ārya Samáj :—

"There are three eternal substances—God, Spirit, and Matter. In the second of the ten 'Principles of the Ārya Samáj,' God is defined as—

"All true, all knowledge, all beatitude, incorporeal, almighty, just, merciful, unbegotten, infinite, unchangeable, without a beginning, incomparable, the support, and the Lord of all, all-pervading, omniscient, imperishable, immortal, exempt from fear, eternal, holy, and the cause of the universe."

"The mantras or hymns of the four Vedas are the only inspired scriptures and they were communicated by God to the four Rishis, Agni, Vayu, Aditi and Angiras. These Rishis were human, but they were distinguished by being *Mukta-jīvan*, i.e., they had completely passed through the cycle of re-births in the world immediately before this. Of the remaining Hindu scriptures, 'The *Bhagavat* and the other seventeen *Puranas* are mythology, religious comedies, novels, mysteries or miracle.' The commentaries attached to the Vedas, the Brahmanas, and Upanishads, and the other Smritis are not inspired works, and while they are of value as the productions of sages versed in Vedic lore and have the virtue of antiquity, anything found in them which in the slightest degree contradicts the Vedas must be rejected. The soul is incorporeal and unchangeable, but is always perfectly distinct from God. The relation between these two entities is compared to that between material objects and the space they exist in—for God is defined as all-pervading. The soul is subject to re-birth which may be in the form of a human being, an animal or a vegetable, on account of 'ignorance, which consists in the perpetration of vicious acts, the worship of objects in place of God, and the obscurity of intellect.' 'Salvation is the state of emancipation from the endurance of pain, and subjection to birth and death, and (the state) of life, liberty and happiness in the immensity of God.' Heaven and hell are figurative terms for periods of happiness or misery, not places where the soul dwells. Eternity is divided into periods of four hundred millions of years each, which are alternately eras of existence (*Bráhmān*) and non-existence (*Bráhmātrī*), and the present time is nearly at the middle period of an era of existence.

"The sixth of the ten principles of the Society declares that 'The primary object of the Samáj is to do good to the world by improving the physical, intellectual, spiritual, moral, and social condition of mankind,' while the eighth points out to the Ārya that 'he should endeavour to diffuse knowledge and dispel ignorance.' In accordance with these very desirable injunctions the Āryas do, as a matter of fact, insist on education both of males and females and the result is that while amongst Hindus hardly one male in thirteen aged 20 or over can read and write, almost half the Āryas of the same ages are literate.

* It is, of course, well known that the founder gave his daughter in marriage to the Mahārāja of Kuch Bihar.

"The Samáj holds strong views on the subject of marriage, and it is laid down that girls should not be married before the age of 13, and that a more suitable time is 14 to 16, while bridegrooms should be at least 18. At weddings, while no objection is made to the payment of a suitable dowry, lavish expenditure on such items as nautch girls and fireworks is discouraged. Similarly the legality of the remarriage of widows is insisted on and during the year 1901 accounts of two such remarriages in these provinces were published, one being in a Bráhmaṇ, and the other in an Agarwala, family. The question of the age at marriage is, however, merely a portion of the wider question of caste restrictions as a whole, and in regard to these it may be said generally that the preaching of members of the Samáj is an advance of their practice. As might be expected, they hold to the fourfold division into Bráhmaṇs, Kshatriyas, Vaishyas and Sudras, but the general trend of opinion seems to be towards the doctrines promulgated in the Institutes of Manu, and the Mahábhárat that caste should not be regarded merely as determined by birth, for a man's occupation, knowledge of the Vedas, and way of life must also be considered. To accept such a view in its entirety would involve cutting adrift from the Hindus of to-day, and the Aryas are not at present prepared to do this, but the reform of the caste system is kept steadily in view, and some advance has been made. While no case has been reported to me in which a marriage has been effected between two totally unconnected castes, I have heard of two marriages which would undoubtedly conflict with the ordinary views of orthodox Hinduism. In one, a Dhai Ghar Khattri married his daughter to an Arora, and in the other a Sanadhya Bráhmaṇ girl was married to a Bajpai Bráhmaṇ. In the matter of food also there is a tendency towards relaxing the ordinary restrictions of the Hindus, without a too complete severance from them. Thus, I am assured that the Mahátma party amongst the Aryas would not object to employ as cooks men of low caste according to Hindu ideas, such as Kumhars, as long as they were vegetarians, and were not sprung from one of the castes whose occupations are considered wholly unclean, such as Chamars, Doms, and sweepers. Aryas, even of the same family, always use separate plates to eat from, and do not eat from a common platter; but they do not object to men of different castes eating at the same table * *

"Converts are usually made from orthodox Hindus but special efforts are directed to reconverting as Aryas persons who have themselves been converted from Hinduism to Christianity or Islam, or the descendants of such persons. Even Christians of non-Asiatic descent, or Musalmans, who by race are not connected with India, would be accepted, though I have heard of no such person becoming an Árya. The ceremony of conversion is simple. The would-be Árya lives on milk alone for a period of fifteen (or according to some authorities thirty) days, this being known as the *Chaudrain birt*. The admission into the Samáj is made the occasion of a public meeting, at which the convert declares his adherence to the ten principles of the Samáj, a great *homa* sacrifice is performed, passages from the Vedas are recited, and the convert distributes sweetmeats to those present. In the case of a reconversion from Islam the convert, if he or his ancestors belonged to a twice-born caste, would assume the sacred thread again."

645 In the Report on the Census of the Punjab in 1881 Sir Denzil Ibbetson Sikhism. gave a full account of the rise and gradual development of Sikhism, from the purely religious reforms of Bába Nának to the political organization inaugurated by Guru Govind and completed by the redoubtable Ranjit Singh. Of the Sikh creed at the present day Mr. Rose furnishes the following summary:—

"It is not easy to say what is the distinctive creed of Sikhism. It is nearly always difficult to state a religious creed, and in the case of Sikhism there is the great difficulty that the Gurus, from first to last, strove, like the modern Hindu reformers, not to break away from the ancient beliefs, but to reconcile them with a purer creed. Unfortunately this resulted, as probably it always must result, in a medley of beliefs, so that within Sikhism we find many religious ideas at variance with its ideal creed. That creed involves belief in one god, condemning the worship of other deities: it prohibits idolatry, pilgrimages to the great shrines of Hinduism, faith in omens, charms or witchcraft, and does not recognize ceremonial impurity at birth or death. As a social system it abolishes caste distinctions, and as a necessary consequence, the Brahmanical supremacy and usages, in all ceremonies, at birth, marriage, death, and so on. But this creed is probably accepted and acted up to by a very small number even of those who call themselves true Sikhs."

646. Jainism was formerly supposed to be a comparatively recent off-shoot Jainism of Buddhism, but modern research has shown that it is quite as ancient as the latter, and was founded independently by a Kshatriya Prince, named Vardhamána or Mahávíra, who was born at Vaisali, near Patna, about 599 B. C.* He at first became a monk of the order of Pársvanáth, but subsequently left it and, rejecting the Vedas, founded an order of his own, one of the leading tenets of which was absolute nudity. He became known as a Jína, or spiritual conqueror, from which the term Jain is derived. His followers were most numerous in North and South Bihar and came chiefly from the ranks of the Kshatriyas and Vaisyas. The artizan classes were but little influenced by his

* For a full review of recent discoveries Dr. Hoernle's Presidential Address to the Asiatic Society of Bengal in February 1898 may be referred to (Proceedings, February 1898). The Jains themselves have begun to interest themselves in their ancient history, and a society has been formed with the object of promoting a systematic investigation.

propaganda. He died about 527 B. C. About two hundred years later a section of the Jain monks abandoned the habit of nudity, and this led to a schism, the two sects being known, respectively, as *Svetambara* or clothed in white and *Digambara* or naked (sky-clad). The former made a collection of sacred books about 300 B. C., which is still in existence, and has of late attracted the attention of Professor Bühler and other scholars.*

The chief point of difference between Jainism and Buddhism is that the former rejects the doctrine of Nirvāna, and believes that when the soul has been delivered from the trammels of successive existences it begins a spiritual life in some indefinable mansion of the blessed. The Jains worship the saints who have attained this spiritual life. Chief amongst these is Pārsvanāth, whose order Mahāvira originally entered, and who is regarded as the latter's immediate predecessor. His image is found in many Jain temples, and from him the sacred hill of Paresvanāth takes its name. Buddhism, says Dr. Hearnle, was more practical than Jainism, which was comparatively speculative and unenterprising, and having an active missionary spirit developed into popular religions in Ceylon, Burma, Tibet and other lands far beyond the borders of India.

Jainism also differed from Buddhism in that it admitted its lay adherents into communion with the order; devotional services were held for them, they were bound by vows, and rules were framed to regulate their position and conduct. They thus formed an integral part of the community. Buddhism, on the other hand, gave its lay adherents no share in the monastic organization, and held no services for their benefit. Consequently, when the Brāhmanic revival of Sankar Achārjya came, and was followed by Muhammadan persecution and the destruction of monasteries, Buddhism, as an independent creed, simply disappeared. Jainism, on the other hand, still survives as the religion of many of the Baniya castes, who represent the ancient Vaisyas. In the southern part of the Bombay Presidency there are also cultivators who profess this faith and in the Baroda city a few Marāthās are reported to have been recently converted to it. In Rajputana and Gujarāt, wealthy Mārwarī merchants often expend large sums in the construction and maintenance of temples, *apāsraṇs* (homes for their wandering ascetics), *pinjrapols* (homes for cattle), and schools for Jain learning. There is an extensive library of Jain religious and other writings at Patan in Baroda. In some parts, *e.g.*, in Central India, the Jains are said to admit no connection with Hindus at all, but elsewhere, as in Baroda, they are equally anxious to be regarded as a Hindu sect and not as members of a separate religious body. In either case the schism seldom operates as a bar to marriage or commensality any more than do differences which are admittedly only sectarian. The Jain Agarwals, Oswāls, and Shrimālīs freely intermarry with those who belong to the Vaishnava sect of Hindus. There are a few exceptions, but this is not surprising when we remember how easily restrictions on marriage spring up, even when there is no religious difference to account for them. If a Hindu girl marries a man who is a Jain, she attends the Jain ceremonies when in her husband's house and worships the Brāhmanical gods when she goes to visit her parents, thus affording a striking illustration of the inextricable confusion between social and religious observances which so often exists in this country.

The principal Baniya castes who profess this religion are the Oswāls and Shrimālīs, almost all of whom returned themselves as Jains and the Agarwals, of whom, however, the great majority are Hindus.

Jain Sects

647. The main Jain sects are the ancient divisions of the Digambara, whose images are unclothed, whose ascetics go naked and who assert that woman cannot attain salvation, and the Svetambara, who hold the opposite view regarding women and whose images are clothed in white, and the more recent off-shoot from the latter, known as Dhundia, who carry to an extreme the doctrine of the preservation of animal life, and worship *gurus* instead of idols. In

*Dr. Hearnle points out that neither Buddhism nor Jainism are religions in the strict sense of the word, but are rather monastic organisations of a type very common about the period when they were founded. Their rules and observances, and their tenderness for life and aversion to meat are largely drawn from those of similar Brāhmanic organisations, but the latter had gradually come to exclude all who were not Brāhmins, and this led to opposition, as a result of which the non Brāhmanical order discontinued the reading of the Vedas and were thus forced outside the pale of Brāhmanism. They did not represent a revolt against the tyranny of caste but only against the caste exclusiveness of Brāhman ascetics, caste as such was fully acknowledged by them. Lastly, the Buddhist or Jain priest only acted as the spiritual guide of his followers; for their religious and ceremonial observances Brāhman priests had always to be called in.

Central India nearly half the total number of Jains returned their sect as Digambara, nearly one-third as Svetambara, and one-nineteenth as Dhundia, while about one-seventh failed to mention their sect. In Baroda, the Svetambara sect is stronger and claims nearly three-quarters of the total number, compared with only one-fifth who are Digambaras, and one-twelfth who are Dhundias. The proportions reported from Rajputana are Svetambaras 45 per cent., Digambaras 33, and Dhundias 22 per cent. In Bombay also the Svetambaras are the more numerous amongst those who returned their sect, but as three-quarters of the Jains failed to do so, the figures are not of much value.

648. When the East India Company gained a foothold in India, Buddhism Buddhism. seemed to have disappeared from the land, and although its doctrines were mentioned, in order to be refuted, in the philosophical works of the Hindus, the word was little more than a name to the Pandits, and was absolutely unknown to the common people. The philosophic side of Buddhism, as ascertained from Hindu sources, was first enquired into by Colebrooke,* but it is to the indefatigable researches of Brian Hodgson that we owe the discovery of Buddhism as a living religion in Nepal. While Resident at Khatmandu he investigated the subject closely and the results are embodied in a most interesting paper in the second volume of the transactions of the Royal Asiatic Society.† He showed how the philosophic agnosticism of Buddha gave way to the theory that the Ādi Buddha, by his union with the primordial female energy called Prajna, gave birth to five Buddhas, who each produced from himself by *dhyāna* (meditation) another being called his Bodhi-satwa or son. The chief of these latter was Avalokita, who, with his Sakti Tārā, eventually became the keystone of northern Buddhism. There arose also numerous other Buddhas, demons, and deities, all of which were objects of worship, and then came the introduction of the Tāntrik mysticism, based on the pantheistic idea of *Yoga*, or the ecstatic union of the soul with the supreme spirit. At this stage, as in Tāntrik Hinduism, the Saktis or female counterparts of the Bodhi-satwas, occupied the most prominent position, and the esoteric cult of these female deities became every whit as obscene as that practised by the Kaula or extreme sect of Śākta Hindus. It was this form of Buddhism which was introduced into Tibet, where it became even more debased by the incorporation of the demon worship which preceded it and has been ably described by Colonel Waddell.‡

The above developments were for the most part confined to the north of India and the southern Buddhists adhered much more closely to the purer creed of the original founder. The differences which arose in matters both of doctrine and of ritual led to frequent disputes, to compose which the Scythian king Kanishka called together the celebrated Council at Jullunder about the end of the first century A.D. This Council, instead of healing the schism, accentuated it, and the Buddhists of India and Ceylon became thenceforward divided into two schools, the Northern and Southern, known respectively as *Mahāyāna* and the *Hinayāna*, the big vehicle and the small, because while the former held that salvation might be attained by all, the latter confined it to a select minority. In its corrupt later developments, northern Buddhism contained within itself the seeds of dissolution, but its final collapse, as a separate religion, was due to Muhammadan persecution and the massacre of the Buddhist monks. It has not, however, wholly disappeared, and its cult still survives, not only in Nepal and part of the Himalayan area which lay outside the influence of the Muhammadans, but also, though in a mangled and scarcely recognizable form, amongst many of the lower sections of the community, especially in parts of Bengal.

649. The survivals of Buddhism in this Province have of late attracted the Survivals of Buddhism in Bengal. attention of Mahāmahopādhyāya Hara Prasad Sastri, who supplied the following interesting notes on the subject for my Report on the Census of Bengal:—

“We learn from the Si-u-ki that during the first half of the seventh century Buddhism was the prevailing religion in Bengal. The author, the celebrated Chinese traveller Huen Sang, mentions indeed the heretics; but it is not known who these heretics were. Some of them undoubtedly were Brāhmanists.

“During the three or four centuries which followed the composition of the Si-u-ki, the Brāhman came from Kanauj with their ever faithful adherents, the Kāyasthas, and a silent

* J. R. A. S., volume I, pages 549—579.

† This and subsequent papers on the same subject have been reprinted in the “Languages, Literature, and Religion of Nepal and Tibet,”—Trubner and Company, London, 1874.

‡ The Buddhism of Tibet or Lamaism.

religious and social revolution was accomplished, in which the Bráhmans had everything to gain and the Buddhists everything to lose. Traces of the existence of Buddhism as a living religion can be found even up to the sixteenth century, and then it is completely lost in the populous plains of Bengal, Bihar, and Orissa. In the outlying districts, however, in hill tracts, and in neglected nooks and corners, it is still professed by a few thousands of men. Thus in Chittagong there are the Baruás who profess the Buddhist faith and belong to the southern school of Buddhism. They think that they obtained their Buddhism from Burma and Ceylon, and that within the last two or three centuries. The Chittagong Hill Tracts is a professedly Buddhist district, and the inhabitants seem to have adhered to their Buddhism from very ancient times. Their Buddhism is not altogether of the southern school, because they have their temples of gods and goddesses. In the Sub-Himalayan regions bordering on Bengal, the Bhotias and some other hill tribes profess Buddhism greatly mixed up with the superstitious observances of degenerate later times known as Mantra-yána, Vajra-yána, Kála-chakra-yána, Lámáism and Devil-worship. The Newárs of Nepal profess what they call Hinduism, but in their estimation it has two *Márgas* or ways—the *Siva-Márga* and the *Buddha-Márga*. Half the Newárs are Buddhists. Though they profess to be Maha-yánists, they have mixed up their faith with much that belongs really to the subsequent Yánas of Buddhism. But they still adhere to Indian Buddhism, and have not borrowed anything from Lámáism. In the Orissa Tributary Mahals there is a State known as Baud, the Chief of which derives the name from Buddha, and says that Buddhism is still professed by a considerable portion of his subjects. The Savaras on the borders of Orissa are said to be still Buddhists. The Savaras who cook in the great temple of Jagannáth are supposed to belong to the same religion. There is a small, industrious, but very turbulent, community in Barisal, known as the Maghai community, who profess Buddhism. They seem to have settled in that maritime district since the sixteenth century, when the Arakanese, known to the Musalman rulers of Bengal as Maghs, were the terror of Lower Bengal and the Bay. These are the only people who still profess Buddhism on a soil in which that religion was first preached, where it flourished for thousands of years, but alas! where it is completely forgotten.

"The traces of Buddhism up to the sixteenth century, mentioned above, consist of many references in books, colophons of manuscripts and inscriptions. Thus we know from Tibetan sources that the great monk Dípankara Shrí Jnána, known in Tibet as Atisa, was invited from Vikrama Shila in Magadha to Tibet in the eleventh century to reform the Buddhist faith prevailing there. There is a copy of Bodhicharyávatara-tíká by Prajná Kaza Shrijnána copied in the same century. The copyist speaks of the author as *talápádanám* showing that he was a pupil of the author. A copy of the Astasahasriká prajnapáramitá made at Nálanda is to be found in the Asiatic Society's collection, bearing the date of sixth year of Mahipáladeva, who reigned in the same century. In the twelfth century, the great Naiyáiká Gangesopádhyaía a scholar of Mithila, whose date is universally accepted amongst pandits as 750 years before this time, wrote his work with the avowed object of dispelling the darkness of Pásandas, i.e., Buddhism. In the same century Súlapani, the great writer on Hindu law and ritual, mentions the Buddhists as a naked people whose very sight is to be avoided. In the Ballála Charita we find Byá-dom-pa fighting with Ballála to avenge an insult offered to the Buddhist priest of Mahásthán. In the thirteenth century there is an inscription at Bravastí dedicating a Buddhist temple for the purpose of Buddhist worship, and in the same century a Buddhist priest from Tamruk went to Lower Burma and instituted a reformation along with other Buddhist priests of the place. His deeds are recorded in the *Kalyáni* inscriptions. In the fourteenth century a Bengali Bráhma became a convert to Buddhism and proceeded to Ceylon, where the reigning king Parákrama Váhu made him the sole supervisor of Buddhist religious establishments in the kingdom. In the fifteenth century Buddhist manuscripts were still copied in Bengal, and a manuscript copied about the middle of the century is now in the Cambridge collection of Nepalese Buddhist manuscripts.

"In the sixteenth century Chaitanya is said to have met Buddhists in Southern India and Nityananda in the Himalayan regions. Chúdámáni Dása, one of the biographers of Chaitanya, mentions the Buddhists as rejoicing at his birth. In the seventeenth century Buddha Gupta-nátha wandered in various parts of India and found Buddhism flourishing in many places. Then it is lost altogether. For two or three centuries Buddhism was absolutely unknown in India. The revival of Sanskrit learning, fostered by European Orientalists brought Buddhism again to the notice of the Indian public, and it became a problem how to account for the complete disappearance of Buddhism. Brian Hodgson thought that Náthism was the bridge which joined the corrupt Buddhism of later days with the Tántrik-Hinduism of modern times. There were Náthas or Lords who boasted of having attained miraculous powers and who had numerous followers. They were all Buddhists. But their Buddhism was not of the strictest kind. The Saivas claim some of them as their *Gurus*. But the rest were undoubtedly Buddhists. These belonged to the lowest classes of people—Háris, Doms, and Chandáls. This Náthism appears also to have been the bridge which united Lámáism, on the one hand, and the *Gurus* or spiritual guides of the Hindus, on the other. Both these proceeded from the same sort of man-worship which is the essence of Náthism.*

* Brian Hodgson's explanation solves only one or two points of the great problem connected with the disappearance of Buddhism. A few more points are solved by the fact that the writers

* This adoration of the Gurd is one of the most characteristic features of the Vaishnava revival in Bengal. The Vaishnavas say :—When Hari is angry the Guru is our protector, but when the Guru is angry we have no one to protect us. This servile veneration of the Guru is called Gurupádaraya. (Sketch of the Religious Sects of the Hindus, page 103.)

of Tántrik compilations among the Hindus incorporated as many of the Tántrik Buddhist divinities as they could possibly do without jeopardizing their reputation for orthodoxy. For instance, they incorporated *Manjushri*, *Kshetrapála*, *Tárd*, without even changing their names or their functions. But still there were divinities to whom, even with their wonderful power of adaptation, they could not venture to give a place in their Pantheon, and one of these is *Dharma*. *Dharma* is the second personage in the Buddhist Trinity. In the *Maháyána* school he is changed into *Prajñá*, an abstract idea in the feminine, meaning supreme knowledge, and in the *Mantra-yána* the feminine idea became *Tárd*, a female divinity with five manifestations. The processes of spiritualisation proceeded further and the Buddhists conceived of an *Adi Buddha* and an *Adi Tárá* probably *Kálidá*.

The word *Dharma*, thus slipping from the second personage of the Buddhist Trinity, became confined to the *Stúpa* worship, the visible emblem of Buddhism, to the ignorant multitude. *Dharma*-worship remained confined to the lowest classes of the people, the dirtiest, meanest, and most illiterate classes. All sorts of animal sacrifices are offered before *Dharma*, and the drinking of wine is one of the chief features of his worship. All the lowest forms of worship rejected by the Bráhmans gradually rallied round *Dharma*, and his priests throughout Bengal enjoy a certain consideration which often excites the envy of their highly placed rivals, the Bráhmans, who, though hating them with a genuine hatred, yet covet their earnings whenever these are considerable, and there are instances in which the worship of *Dharma* has passed into Bráhman hands and has been, by them, transformed either into a manifestation of Siva or of Vishnu.

Doubt has been expressed in many quarters regarding the identification of *Dharma*-worship as a survival of Buddhism, and it is, therefore, desirable to recapitulate the facts and arguments by which this has been established. *Dharma* is meditated upon as *Shúnya* *Mátra* or void. The great goal of Buddhism is *Súnyatá*. 'As the lamp is extinguished, so is the soul extinguished.' This is the original idea of annihilation preached by Buddha. In later times, in the hands of the schools, this idea came to be termed *Súnyatá*, concerning which neither existence, nor non-existence, nor a combination of the two, can be predicated. It is void, zero. In Hindu systems of philosophy we find the Buddhist credited with the theory of the evolution of entity from non-entity, and that very non-entity is the essence of *Dharma*, and in that form his votaries are required to meditate upon him. This is an undoubted Buddhist idea. The ceremonies and fasts in honour of *Dharma* all take place on the full moon day of *Baishákh*, the birthday of Buddha. The ignorant worshippers, all of them, are aware that *Dharma* is very much respected in Ceylon. And what religion has a greater vogue in that island than Buddhism? The *Dharma* worshippers are fully aware that *Dharma* is not an inferior deity; he is higher than Vishnu, higher than Siva, higher than Brahmá, and even higher than Párvati. His position is indeed as exalted as that of Brahmá in Hindu philosophy. In fact, one of the books in honour of *Dharma* gives an obscure hint that the work has been written with the object of establishing the Brahmáhood of *Dharma*. The representation of *Dharma* in many places is a tortoise. Now a tortoise is a miniature representation of a stupa with five niches for five Dhyáni Buddhas. At Saldá in Bankura an image of Buddha in meditative posture is still actually worshipped as *Dharma*.

The worshippers of *Dharma* are unconscious of the fact that they are the survivors of a mighty race of men and that they have inherited their religion from a glorious past. Political and social revolutions of centuries have brought them to the lowest point of degradation. But if they ever become conscious of the fact that they are the survivors of the Indian Buddhists, the civilizers of Asia, they are likely to be better men and more useful members of society. *Dharma*-worship prevails in the whole of Western Bengal, and in almost every village there is a temple of *Dharma*. There are also many places consecrated to *Dharma*, where annual and other festivals take place in his honour."

650. Of the religion of the Parsis, called Mazdeism from the name of its ^{Zoroastrianism} supreme deity, or more popularly, Zoroastrianism, from the Greek rendering of Zoroasthra, the reputed founder of the creed, a full account was given by Mr. Baines in his Report on the Census of India, 1891 (pages 165 to 167).

651. The bewildering diversity of religious beliefs collected under the name of ^{Muhammadanism} Hinduism has no counterpart amongst the Muhammadans who, like the Christians, are limited as to their main tenets by the teaching of a single book, the Korán. They are not, however, any more than are the Christians, free from sectarian differences, and the followers of each sect regard those who dissent from them with a rancour almost in inverse ratio to the importance of the points at issue. The two main sects are of course the Sunnis and the Shiahhs. The former accept the authority of all the successors of Muhammad, whereas the Shiahhs look upon the first three, Abu Bakr, Omár, and Osmán, as interlopers, and regard Ali, Muhammad's son-in-law, as the first true Khalípha; they also reverence his martyred sons, Hasan and Husain. In India the Sunnis greatly preponderate,* but they usually share with the Shiahhs their veneration for Hasan and Husain and strictly observe the *Ramzán*. The religious writings of the Sunnis consist not only of the Korán, but also of the Hadís or traditional

* The Muslims are the chief supporters of Shiah doctrines in India. The Bohras of Gujarat and Rajputana also belong to this sect.

sayings of Muhammad not embodied in the Korán. These are in themselves hard to understand, but there are four recognised glossographers, and the followers of their commentaries are called after them, being known respectively as Hánafí, Sháfáí, Málíkí, and Hambalí. The differences are slight, but the main characteristic of the Hánafís, who are by far the most numerous in India,* is that the traditions are freely interpreted in the light of analogical reasoning, whereas the others take their stand against any modification of the actual words of the Prophet. Some, who interpret the traditions for themselves, without following any particular Imám, call themselves *Ahli Hadís*, "people of the tradition", or *Ghair Mukallid*, "those who do not wear the collar" (of any Imám).

The Wáhábí
Movement.

652. In the 17th century a new sect of Muhammadan purists arose in Arabia who rejected the glosses of the Imáms and denied the authority of the Sultan, made comparatively light of the authority of Muhammad, forbade the offering of prayers to any prophet or saint, and insisted on the necessity for waging war against all infidels. They were called *Wáhábís* after their founder, Muhammad Wáháb of Nejd. Their doctrines were introduced into India by Saiad Ahmad Sháh of Rai Bareilly, who proclaimed a *jihád* or holy war against the Sikhs in 1826, and founded the colony of fanatics on the North-West frontier. Saiad Ahmad and his disciple, Maulavi Muhammad Ismail, gained many converts. They made Patna their headquarters whence they sent out emissaries to various parts of India, but were most successful in East Bengal. The following account of the operations of these and other reformers in that province is extracted from the Bengal Census Report:—

"Before noticing them, however, we may refer to a movement, similar but independent, in East Bengal, which was originated by Hájí Shariat Ullah, the son of a Jolahá of Faridpur, who returned about 1820 A. D. from Mecca, where he had been a disciple of the Wáhábís, and disseminated the teachings of that sect in Faridpur and Dacca. Amongst other things he prohibited the performance of Hindu rites and the joining in Hindu religious ceremonies, the preparation of *Tazias* (models of the tomb of Hassan and Husain) and the praying to *pírs* (saints) and prophets. He also held that India was *Dáru-l-harb* (the mansion of war), where the observance of the Friday prayers is unlawful and the waging of war against infidels is a religious necessity. He gained many followers, chiefly amongst the lowest classes. His son Dudhu Miyán, who succeeded him, was even more successful, and acquired a paramount influence amongst the Muhammadan cultivators and craftsmen of Dacca, Backergunge, Faridpur, Noakhali and Pabna. He partitioned the country into circles and appointed an agent to each to keep his sect together. He endeavoured to force all Muhammadans to join him, and made a determined stand against the levy of illegal cesses by landlords, and especially against contributions to the idol of *Durgá*. He made himself notorious for his high-handed proceedings, was repeatedly charged with criminal offences and, on one occasion at least, was convicted. He died in 1860.

"Concurrently with this movement, other reformers were spreading the doctrine of the Patna School, the most successful of whom was Maulaná Karámat Ali of Jaunpur. He made two important modifications in the tenets of his leaders. In the first place he did not altogether reject the glosses on the *Hadís*. He recognised that there were imperfections and contradictions, but he held that they were not sufficient to justify the formation of a new sect. Consequently he and his followers are generally regarded as belonging to the Hánafí sect. Secondly, in his later years at least, he declared that India under English rule was not *Dáru-l-harb*, and consequently that infidels are not here a legitimate object of attack and the Friday prayers are lawful. He strongly denounced the various Hindu superstitions common amongst the people, and especially the offering of *Shirnis* or cakes to the spirits of ancestors on the *Shab-e-barát*. He also prohibited the use of music and the preparation of *Tazias*. On the other hand, he held that holy *pírs* possessed a limited power of intercession with God and encouraged the making of offerings at their tombs. Karámat Ali died in 1874. His mission was ably carried on by his son Hafiz Ahmed, who preached all over East and North Bengal and died only about three years ago. There are numerous other preachers of the same doctrines, of whom Sháh Abu Bakr, of Furfura in the Hooghly district, is one of the most famous. The Hazrat of Banaudhia in Murshidabad is also well known, but he owes his influence less to his intellectual qualifications than to his reputation as a saint endowed with miraculous powers.

"These two reformed sects are collectively known as *Furazi*,† 'followers of the law,' *Namás Hafiz*, 'one who remembers his prayers,' *Hudáyá'i*, 'guides to salvation,' or *Shá'ra*, 'followers of the precepts of Muhammad' as distinguished from the *Sábiki*, 'old,' *Berabí* 'without a guide,' *Bedayyatí* or *Beshára*, by which terms the unformed Muhammadans are generally known. The distinctive name of the followers of Karámat Ali and his successor is *Ta'ayyusi*, 'those who appoint,' from their practice of appointing from their number a leader who decides

* It is impossible in the space available to particularise, but it may be mentioned that in parts of Southern India the Sháfáís preponderate.

† This term is sometimes said to be applicable more particularly to Dudhu Miyán's party.

religious questions and takes the place of a *Kāzī*, thereby making the observance of the Friday prayers lawful. The followers of Dudhu Miyaṅ are called *Wāhābbīs* by the *Ta'arūqīs*, but the name is held in bad odour, and they themselves prefer the appellations of *Muhammadi*, *Ahl-i-hadīs* or *Rāfi-qadāin*, the last name being given with reference to their practice of raising their hands to their ears when praying, whereas the ordinary Sunnis fold their arms in front and the Shiāhs allow them to hang down.* They are also sometimes called *Amīn*, because they pronounce Amen in a loud voice like the *Shāf'ī* sect, and not in an undertone like the followers of Abu Hānifa. *La-Mazhabī*, 'no doctrine,' is another designation given them, because they reject all doctrines except those contained in the Korān.

"Since Dudhu Miyaṅ's death his sect has been gradually dwindling in numbers, and at the present time the followers of Karīmāt Ālī greatly outnumber them all over Eastern Bengal.

"Owing, it may be, to the Wāhābbī trials, the reformers in Bihar have not hitherto gained the success achieved in Bengal, but at the present time considerable activity is being shown by the leaders of the *Ahl-i-Hadīs*, as the modern representatives of the *Wāhābbīs* prefer to style themselves. Patna seems to be still the headquarters of the sect, but unfortunately I am without information regarding that district. In the other districts of South Bihar the number of its adherents is still very small. In Gaya it is reported that the only *Wāhābbīs* are police constables from Patna. The movement in North Bihar was inaugurated by Maulavi Nazir-Hussain, a native of Monghyr now resident in Delhi, and others. The tenets of the sect appear to be intermediate between those of the two branches of the reformed church in Bengal proper. As regards the question whether India is *Dār-ul-harb* or *Dār-ul-Islām* opinion appears to be divided, but Friday prayers are enjoined. The hands are raised in prayer and the 'Amen' is pronounced in a loud voice. The use of music, the celebration of the *Muharram* festival, the offering of the *shirni* to the manes of ancestors, and the veneration of *pīrs* are strictly forbidden. In Muzaffarpur the movement at first gained ground rapidly, but at present it is making slow progress. In Darbhanga and Champaran it is still spreading, but in the latter district it is estimated that the total number of its adherents is still less than a thousand. In Saran the amount of success hitherto achieved is very small. In the Sonthal Parganas the reformed doctrines are being energetically propagated amongst the local Muhammadans and with a considerable amount of success. In all cases it is the Aylāf, or lower class of Muhammadans, who are most attracted by the preaching of the reformers, the better classes generally hold aloof.

653. At the present day the fanatical element of the Wāhābbī movement seems in many parts to have died out, and the efforts of the reformers are directed mainly to the eradication of superstitious practices not sanctioned by the Korān and to the inculcation of the true principles of the religion. The following remarks of Mr. Burn are of more than local application.—

The tendency of reform at the present day

"In cities almost every mosque has its school, where boys are taught the rudiments of their faith, and the smaller villages in rural tracts are regularly visited by itinerant Maulvis. The propaganda is facilitated by the circulation of small cheap religious books which give the ordinary prayers in use in Arabic with an explanation of the meaning, and directions for repeating them, in fairly simple Urdu. The whole of the Korān also has been translated into Urdu, and although the translation cannot be said to have become really popular, yet there is little doubt that it will lead to a fuller knowledge by Muhammadans in general of the principles of their faith."

Space forbids a complete enumeration of the numerous minor sects of which an account is given in the provincial reports for the present and previous censuses and elsewhere, e.g., in Mr. MacLagan's Report on the Punjab Census of 1891, and it must suffice to mention the Nechari school founded by Sir Saiyad Ahmad Khan and Saiyad Amir Ali Khan, whose object was to adapt the religion of Muhammad to the spirit of the age, to clear away the glosses of commentators, to get at the essential teaching of the Prophet and to show how this teaching has in it nothing inconsistent with the highest non-religious philanthropy of to-day. It is also interesting to notice that there is at the present time in Northern India a religious teacher of the name of Ghulam Ahmed who claims to be the Mahdi or Messiah expected by Muhammadans and Christians alike, and has obtained a considerable number of followers in the United Provinces, the Punjab and Sind. He "repudiates the doctrine of *Jihād* with the sword," and regards as absolutely unlawful wars undertaken for the propagation of religion.

654. Mr. Burn has some interesting notes on the actual beliefs of the Muhammadan community. He says:—

The actual beliefs of Muhammadans

"As in the case of Hinduism, so in the case of Islam we find the actual belief of the ordinary man diverging considerably from the standard of the religion, and his practice varies still more. A distinguishing feature of the two beliefs is well illustrated by the term applied to its followers by the latter, *us*, *kitabī* or having a book. If an illiterate Hindu is asked

(1) United Provinces

* The sects, other than of Dudhu Miyaṅ, are sometimes known collectively as the '*Adamrafu*,' or those who do not raise their hands.

to quote the authority for a moral ruling and replies the Shastras forbid it, he probably has no clear idea whether he means a single book or the whole body of Sanskrit sacred literature. To the Musalman of every condition, however, the Qoran bears a definite meaning and is the ultimate source of all inspired knowledge, though there may be disagreement about the authority of other writings to which some classes may attribute almost equal validity. This fact in itself tends towards a uniformity in essential beliefs in Islam which is wanting in Hinduism and there are few Muhammadans, however illiterate or unintelligent, who cannot repeat the creed: "There is no God but God and Muhammad is his Prophet," and who do not understand and believe this literally. Islam prescribes the performance of certain duties apart from the moral law, which briefly include (i) prayer, (a) daily, (b) on certain festivals, (ii) fasts, especially during the month of Ramzan, (iii) the giving of alms by those who can afford it, (iv) the pilgrimage to Mecca. In regard to prayer the ignorance of the ordinary man is a stumbling-block, but there are few who do not repeat the creed on rising, and hardly a Musalman will be found absent from prayers on the *Id-ul-fitr* and the *Id-ul-zoha*. The obligatory five prayers a day and the prayer on Friday morning in the mosque are not performed by the great majority of the masses, but ignorance of the words to be used is accountable for this to a certain extent. Even in the Idgah on the two occasions mentioned the majority of those present are unable to do more than imitate the movements of their better informed neighbours. The observance of the fast during Ramzan is probably stricter amongst the masses than amongst the higher classes excepting those individuals who are exceptionally pious and orthodox. In the giving of alms the Musalman is in no way behind the Hindu, and in fact a fixed proportion of savings over a certain amount is prescribed, and in many cases is actually distributed to the poor. A practice, which was formerly much commoner than at present in all classes of the community, still exists, by which a woman with a newly-born child will take a poor man's motherless infant and suckle it for charity. The opportunity of making a pilgrimage to Mecca or to Kerbela does not come to the ordinary man as a rule. In regard to morality the average Musalman has much the same standard as the average Hindu or the average Christian. * * * * The practices most condemned by all classes are the eating of pork, the smoking of preparations of opium (*mada* and *chandu*), perjury in respect of an oath taken on the Qoran in a mosque, incest, adultery and open immorality. Such offences, as theft, murder and the like are, of course, universally reprobated. * * * * The sanction attaching to sin is of course a divine one, though it is believed its consequence may also be felt in the shape of illness or trouble in this life. Sins are divided into two kinds, according as they are against God only, such as neglecting prayer, or against man also, such as theft, murder, etc. In regard to the latter a belief is strongly held by the mass of the people that if the sinner is forgiven by the person sinned against, that particular sin will not tell very strongly in the day of judgment. Such offences are evidently considered to be much of the same nature as offences classed by the criminal law as compoundable, in which the court has no option but to acquit, if the complainant and the accused wish the case to be compounded. * * * * We have seen in the case of Hinduism that the belief in one Supreme God in whom are vested all ultimate powers is not incompatible with the belief in Supernatural Beings who exercise considerable influence over worldly affairs, and whose influence may be obtained or averted by certain ceremonies. Similarly, in the case of Islam, while the masses have, on the whole, a clearer idea of the unity and omnipotence of God than the ordinary Hindu has, they also have a firm belief in the value of offerings at certain holy places for obtaining temporal blessings. Thus the shrine of Saiyad Salar at Bahraich is resorted to both by Hindus and Musalmans, if a wife is childless, or if family quarrels cannot be composed. Diseases may be cured by a visit to the shrine of Shaikh Saddo at Amroha in Moradabad while for help in legal difficulties Shah Mina's dargah at Lucknow is renowned. Each of these has its appropriate offering—a long embroidered flag for the first, a cock for the second, and a piece of cloth for the third. Other celebrated shrines are those of Bahauddin Madar Shah at Makkampur in the Cawnpore District and of Ala-uddin Sabir at Piran Kahir in Saharanpur. The better educated Muhammadans also believe to a large extent in the efficacy of pilgrimages to these sacred places, but while in their case the spiritual aspect is clearly regarded, in the case of the masses the object in view is not spiritual benefit but material gain. In times of pestilence it is common for the better classes to collect money and flour for distribution to the poor and to call out the *azan* at night from the roof of a house, and to paste texts from the Qoran on door-posts, while in the case of drought it is usual to assemble for special prayers in the Idgah. Even the better educated Muhammadans however pray, in time of trouble, to Khwaja Abdul Qadir Jilani of Baghdad, or Shaikh Munnud-din Chishti of Ajmer. Another ceremony which is believed to be efficacious is to pay a Maulvi to read the *Maulud Sharif*, or account of the birth of the Prophet which is recited in Arabic and explained in Urdu to the persons assembled. With the Shias this is replaced by a *Majlis* at which the deaths of Hasan and Husain are explained."

(2) Bengal

655. The same subject is dealt with as follows in my report for Bengal:—

"The unreformed Muhammadans of the lower and uneducated classes are deeply infected with Hindu superstitions, and their knowledge of the faith they profess seldom extends beyond the three cardinal doctrines of the Unity of God, the Mission of Muhammad, and the truth of the Qoran, and they have a very faint idea of the differences between their religion and that of the Hindus. Sometimes they believe that they are descended from Abel (Hâbil) while the Hindus owe their origin to Cain (Kâbil). Kâbil, they say, killed Hâbil and dug a grave for him with a crow's beak.

"Before the recent crusade against idolatry it was the regular practice of low class Muhammadans to join in the Durgá Pujá and other Hindu religious festivals, and although they have been purged of many superstitions many still remain. In particular they are very careful about omens and auspicious days. Dates for weddings are often fixed after consulting a Hindu astrologer, bamboos are not cut, nor the building of new houses commenced, on certain days of the week, and journeys are often undertaken only after referring to the Hindu Almanac to see if the proposed day is auspicious. When disease is prevalent Sitalá and Rakshya Káli are worshipped. Dharmaráj, Manasá, and Bishahari are also venerated by many ignorant Muhammadans * Sasthi is worshipped when a child is born. Even now in some parts of Bengal they observe the Durgá Pujá and buy new clothes for the festival like the Hindus. In Bihar they join in the worship of the Sun, and when a child is born they light a fire and place a cactus and a sword at the door to prevent the demon Jawán from entering and killing the infant. At marriage the bridegroom often follows the Hindu practice of smearing the bride's forehead with vermilion.† In the Sonthal Parganas Muhammadans are often seen to carry sacred water to the shrine of Baidyanáth and, as they may not enter the shrine, pour it as a libation on the outside verandah. Offerings are made to the Grámya devatá before sowing or transplanting rice seedlings, and exorcism is resorted to in case of sickness. Ghosts are propitiated by offerings of black fowls and pigeons before a figure drawn in vermilion on a plantain leaf. These practices are gradually disappearing, but they die hard, and amulets containing a text from the Koran are commonly worn, even by the Mullahs who inveigh against these survivals of Hindu beliefs.

"Apart from Hindu superstitions there are certain forms of worship common amongst Muhammadans which are not based on the Korán. The most common of these is the adoration of departed *pírs*. It should be explained that the priesthood of Islám is twofold. The law and the dogmas are expounded by the Mullah or learned teacher, the spiritual submission to, and communion with, the deity is inculcated by the *pír* or spiritual guide. There are four famous *pírs* who are universally revered throughout the Muslim world, and all subsequent *pírs* have belonged to one or other of their spiritual systems ‡. They trace back their line of spiritual guides in an unbroken series to the Prophet, who is styled the fountain head of all *pírs*. With the exception of the Ahl-i-Iladís or Wáhábís, almost all Muhammadans of the Sunni sect go through the ceremony of initiation by a *pír*. The disciple or Muríd § places his hands in those of the spiritual guide and declares his belief in the Muhammadan creed, the unity of God, the mission of the Prophet, the truth of the Korán, the existence of angels and the day of resurrection, he then promises to live a virtuous life and to abstain from sin, he calls on the guide and his spiritual predecessors up to the Prophet to witness his declaration, and concludes by affirming that he has become a member of the particular spiritual communion to which his *pír* belongs. The disciple must thenceforth think of his *pír* and of the vows he has made, at least once daily, and he is visited at intervals by the latter who comes to rekindle his zeal.

"Sometimes *pírs* of exceptional sanctity are credited with supernatural powers. Asgar Ali Shah in Muzaffarpur has this reputation, and many persons, Hindus as well as Muhammadans, the educated as well as the ignorant, when afflicted with illness or other calamities, wait upon him for relief. His suppliants offer him money and food, but he seldom accepts their presents. He spends most of his time in a state of abstraction.

"When a holy *pír* departs from this life, he is popularly believed to be still present in spirit and to offer his daily prayers at Mecca or Medina, and his *dargah* or tomb becomes a place of pilgrimage to which persons resort for the cure of disease, or the exorcism of evil spirits, or to obtain the fulfilment of some cherished wish, such as the birth of a child, or success in pending litigation ||. The educated stoutly deny that *pírs* are worshipped, and say that they are merely asked to intercede with God, but amongst the lower classes it is very doubtful if this distinction is clearly recognised, even if it actually exists."

656. In Rajputana the Muhammadans of local origin "still retain their (3) Rajputana and Baluchistan ancient Hindu customs and ideas. The local saints and deities are regularly worshipped, the Bráhman officiates at all family ceremonial side by side with the Musalman priest, and if in matters of creed they are Muhammadans, in matters of form they are Hindus." The beliefs current amongst the wild races on the Afghán frontier are described as follows by Mr. Hughes-Buller in the Census Report for Baluchistan:—

"Bráhúis, Baloch and Afgháns are equally ignorant of every thing connected with their religion beyond its most elementary doctrines. In matters of faith, the tribesman confines himself to the belief that there is a God, a Prophet, a resurrection, and a day of Judgment. He knows that there is a Koran, but in the absence of a knowledge of Arabic and of qualified teachers who can expound its meaning, he is ignorant of its contents. He believes that everything happens

* Goats are often made over to Hindus who perform the sacrifice on their behalf.

† Sometimes sandalwood paste is used instead of vermilion.

‡ As with the Bishops of the Christian Church there is a regular system of ordination, and every *pír* traces his spiritual descent from the Prophet himself through one or other of the four great *pírs* mentioned above. There seems to be but little difference in the cults originating with these *pírs*, except the followers of Abu Ishak of Chist make use of music and singing, and keep the image of their spiritual guide before the mind's eye. These practices are forbidden by the others.

§ The reformed sects object to the words *Pír* and *Muríd*, and replace them by *Ustad* and *shagird* which do not connote the same degree of submission on the part of the disciple.

|| *Apropos* of this adoration of *pírs* and the wonderful acts attributed to them there is a Persian proverb, "The *pírs* don't fly, their disciples make them fly."

by inevitable necessity, but how far this is connected in his mind with predetermination on the part of his Creator it is difficult to say.

"His practice is, to say the least of it, un-Islamic. Though he repeats every day that there is one God only who is worthy of worship, he almost invariably prefers to worship some Saint or tomb. The Saints or *Pirs* in fact are invested with all the attributes of God. It is the Saint who can avert calamity, cure disease, procure children for the childless, bless the efforts of the hunter, or even improve the circumstances of the dead. The underlying feeling seems to be that man is too sinful to approach God direct, and therefore the intervention of some one more worthy must be sought. Anyone visiting a shrine will observe stones, carved pieces of wood, bunches of hair tied to trees, remnants of clothes, horns of wild animals, bells and various other articles of paltry value. They are placed at the shrines by devotees in performance of vows. The mother who is blessed with a child will bring it to the shrine, where she will shave it and offer the hair and the baby's clothes in performance of vows, made during the course of her pregnancy. The object is that the local Saint may thereby be induced to interest himself or herself (for the Saints are of both sexes) in the welfare of the little one. The hunter brings the horns of the deer which he has slain, in the hope of further good sport, whilst those who are suffering from disease pass the stones or carved pieces of wood over the part affected, trusting that by this means the ill from which they are suffering will be removed.

"Superstition is, indeed, a more appropriate term for the ordinary belief of the people than the name of religion. Throughout the province it prevails in every form of grossness. Among the Baloch no man will set out on a journey if he has been told by the Mulla that his star is unauspicious. If some one calls to a Baloch from behind as he is starting on a journey, he must sit down for a while before he proceeds. He will never wear clothes which have been dyed either black or blue, he has even an objection to green, because indigo partakes largely in the manufacture of that colour. For fear of ill-luck he will never cut his beard or hair. An oath by the head of his Sardar is considered more binding than an oath on the Koran, and the belief in the evil eye is universal. Particular tribes and particular groups of tribes have their own superstitious aversions, and the members of the Sardarkhel or chief section among the Rind Baloch have as great an aversion to camel's meat, though it is a common article of food, as other Muhammadans to swine's flesh. It is a common saying among them. 'If I fail in this, may I be made to eat camel's flesh.' Similarly, Lúsharí Baloch will not live in a locality where *Allo*, a small vegetable found in Kachhí, grows. Ordeals by water or fire are still in vogue for the detection of crime. Both Bráhuís and Baloch believe that evil spirits possess the power of robbing grain from the receptacles which contain it, and to prevent their doing so the cultivators place a naked sword beside them. Girls sometimes become possessed by evil spirits, which have to be cast out in open assembly by a Dom, or public musician. When acting in this capacity, the Dom is known as a Shaikh, the term usually applied to converts to Islam.

"Prayer and fasting are the only elements of practice which are strictly observed. Prayer, although the meaning is not understood, is looked on as peculiarly efficacious, 'Loot, but pray,' being a maxim in common use among Afgháns. The total immersion of the body in water for the purpose of purification in certain extraordinary cases, which is prescribed as an adjunct of prayer, is seldom, if ever, carried out. The Baloch go so far as to consider that cleanliness and bravery are incompatible. Afgháns are very strict in the observance of the great Muhammadan fast of the *Ramzan*, as also are the Bráhuís, but the more ignorant among the Baloch hold this duty very lightly. It is seldom that any tribesman makes the pilgrimage to Mecca. The reason lies partly in disinclination and partly in the want of the necessary funds, for, as a rule, he is exceedingly poor. The practice of *Zakát*, or the giving of one-fortieth as alms, is little observed, and there is a saying that though a Mulla possess a saddle of pure gold there is no need for him to give alms.

"Turning now to the negative precepts of the Koran, intoxicating liquor is never used by the indigenous inhabitants of the country, but intoxicating drugs, such as bhang, are taken in some of the towns. Gambling, which appears to have been introduced from India, is said to be common among the Bráhuís and among the Afgháns of Harnai and the Khetráns of Laghári Báikhán, but not among the Baloch. Among the Afgháns the precepts against usury are rendered nugatory by the custom of giving a mortgagee the possession of the land mortgaged until such time as he has repaid the principal with interest, and also by the custom, known as *Salam*, by which a debtor undertakes to repay the loan advanced to him in kind, which is handed over at a valuation which gives the creditor full profit on his loan. Bráhuís and Afgháns allow no share in inheritance to women, they go even further and consider them to be an asset in the division of property which follows a man's death. Indeed the custom of *Walwar*, which prevails among both these races, amounts to nothing more than the purchase of women for wives just as cattle are bought for cultivation. It follows that the *mehr* or deferred dower prescribed by the Prophet is not given. Immorality among women is common. Of theft there is little among the indigenous races except the Marris. This tribe was originally organised for purposes of brigandage, and its members having now no scope for their powers in this direction have turned their attention to the minor crime of theft. Two Baloch proverbs well illustrate their mind-attitude — 'God will not favour a Baloch who does not steal or rob;' and 'The Baloch who steals and murders secures heaven for seven generations of his forefathers.'

'One duty is so incumbent on every tribesman that it may almost be considered a part of his religion. This is the duty of hospitality. An enemy even may not come to his house without being supplied with the best that his host can offer him. The tribesman's door is always open to all comers, and the best meat is specially prepared and laid aside for guests to eat and a

ing placed ready under which he may sleep. Another duty is the taking of blood for blood. A tally of death is kept between tribe and tribe and group and group, and it is the duty of each member of a tribe or group to take the life of any member of the rival tribe or group whom he may come across. Sometimes the feud may be compounded by the giving of money, land, cattle or girls. The Afghans have a proverb 'The sword-cut on my father's arm will be still fresh, though it be avenged in the next generation'."

657. The oldest of the Christian Communities in India is the Syrian Church of the Malabar Coast, which claims, though on doubtful authority, to have been founded by the apostle St. Thomas, and was certainly in existence as far back as the commencement of the sixth century * These Christians were formerly Nestorians whose spiritual head was the Patriarch of Babylon. When the Portuguese obtained a footing in India in the fifteenth century they endeavoured to bring them under the rule of the Pope and to substitute the Latin rite and dogmas for the Syrian; they eventually succeeded in doing so by force, but there was always a strong opposition, and when the power of the Portuguese was broken by the Dutch about the middle of the sixteenth century, many threw off the Papal yoke and placed themselves under a bishop consecrated, not by the Patriarch of Babylon but by him of Antioch, under whose influence they adopted the Jacobite ritual and liturgies.† Since then they have suffered much from internal dissensions, but the main distinction at the present day is between those who favour certain practices of the Anglican Church, or "Reformed Syrians," and those who do not do so, or "Jacobite Syrians." Those who continued to accept the supremacy of the Pope are now often regarded as Roman Catholics, but are more correctly described as Romo-Syrians, their services are in the Syrian language, they follow in part the Syrian ritual, and they have recently been placed under Vicars Apostolic of their own race

Christianity.
The Syrian
Church of the
Malabar
Coast

658 The Portuguese were the first European power in the East and the earliest efforts of modern times in the direction of Christianizing the natives of India were made under their auspices.‡ They were not, however, left long without rivals. In 1542 St. Francis Xavier, of the Society of Jesus, came to India and his example was soon followed by many others, of whom Beschi is perhaps the best remembered, and numerous converts were obtained, chiefly in the Madras Presidency. In more recent times the number of Roman Catholic missions has greatly increased and they are now to be found in all parts of India, one of the most successful being that of Ranchi in Chota Nagpur

Christian
Missions

The earliest Protestant propaganda was that of the Lutherans who established themselves in Tranquebar in 1706 under the patronage of the King of Denmark. The able and devoted Schwartz, who laboured in Trichinopoly and Tanjore throughout the second half of the eighteenth century, was a member of this mission, which has since, to a great extent, been taken over by the Society for the Propagation of the Gospel. The Baptists effected their first lodgment under Carey, who landed in Calcutta in 1793, but owing to the opposition of the East India Company was soon obliged to make his head-quarters at Serampore, at that time a Danish Settlement. The Anglican Church entered the missionary field in 1813 and during the nineteenth century the expansion of missionary enterprise was rapid and continuous. The results however can best be dealt with in the discussion of the statistics in the second part of this Chapter.

659 The Jews of India fall into two main categories. On the one hand there are those who have come to India in modern times for purposes of trade and on the other there are two colonies of long standing on the Malabar Coast, the one in the Cochin State and the other in Kolaba in the Bombay Presidency. The Jews of Kolaba, or the Beni-Israel as they call themselves, are said by Mr. Enthoven to have settled there in the fifteenth century but others are of opinion that they came at a much earlier date, and this is certainly the case in respect of the colony in Cochin, which, even if its own traditions cannot be wholly relied on, is still of

Judaism

* It is mentioned in the writings of Cosmas Indicopleustes who visited India in 522 A.D. An interesting review of the history of the Malabar Church will be found in the Cochin Census Report pages 40 to 60. It is there stated that certain Hindu superstitions still survive amongst the Christian Syrians and that the ideas of ceremonial uncleanness are still strong amongst them.

† It would seem that in earlier times also Jacobite Bishops occasionally visited the Malabar Coast.

‡ The earliest missions being entirely Portuguese, the King of Portugal was given the power to nominate Bishops and the conflict of authority between the Portuguese Archbishop of Goa and his suffragans and the Jesuit and other independent bodies owing direct allegiance to the Pope led to alterations which have only recently been composed to rest.

The statement that the Portuguese were the first in the field, though practically correct, is not strictly true. John of Montecurvinho is said to have visited the Malabar Coast towards the end of the 13th century and to have baptized 100 souls.

not less than 1,200 years standing * Both colonies are divided into two sections, the White and the Black, and the former will neither eat, marry nor associate with the latter In spite of their long sojourn in the tropics, the White Jews, who have from time to time been reinforced by fresh emigrants, are, according to Herr Schmidt, quite indistinguishable from their congeners in Europe, but the Black, both in colour and physiognomy, show unmistakable signs of a mixture of race They themselves claim to be descended from earlier settlers, but the White Jews derive them from old converts with an infusion of Jewish blood due to intercourse between their females and Jewish males However this may be, they now occupy a position of admitted inferiority in relation to the White Jews.

Part II.—Statistical.

General
Distribution
by Religion

660. The general distribution of the population by religion is shown in subsidiary table I and the local distribution with variations since 1881 in subsidiary table II Of the total population, 70 per cent. have been returned as Hindu and 21 per cent. as Muhammadan, 3 per cent. as Buddhist and the same proportion as Animistic, 1 per cent. as Christian; the balance of little more than 1 per cent. is made up of Sikhs, Jains, Parsis, Jews and small miscellaneous items The predominant religion is Hinduism and its relative prevalence can best be understood by discussing the extent to which the other religions compete with it in particular tracts.

Animists.

661. It will be convenient to commence with Animism or the amorphous collection of crude and confused religious conceptions which Mr. Risley has so ably examined in the early part of this Chapter. It has been shown that the tribes whose religions, such as they are, come within this category, are slowly falling under the influence of Hinduism, which, in its lower forms, save that it requires veneration for Bráhmans and cows, differs but little from Animism, and that the border line between the two religions is vague and uncertain. It is impossible to say definitely where Hinduism ends and Animism begins, and a man who by one enumerator would be termed a Hindu by another would be treated as an Animist † As Mr. Enthoven says.—

“The difficulty that the average enumerator has in identifying this stage of belief (Animism) lies, it is to be presumed, not only in his ignorance of the true significance of much that characterises it, but, to a certain extent also, in the fact that he is commonly acquainted with very similar acts of worship, among members of his own religion.”

The rule was that every man's statement as to his religion was to be accepted, but in practice the enumerators often followed their own views in the matter, and in either case, the manner of drawing the line varied greatly in different parts. In the Punjab the enumerators felt a strong dislike to showing as Hindus persons of very low caste, such as Chuhars or Chamárs, even though they may worship the Hindu gods and employ degraded Bráhmans as priests They therefore entered them either as Muhammadans or under their caste name; in the latter case they were apparently tabulated as Hindus. In Baroda, on the other hand, the tendency was in the other direction. the forest and hill tribes number nearly three-quarters of a million, but only 176,000 persons have been returned as Animists. In Bombay the strength of the aboriginal tribes with Animistic tendencies (Bhils, Kols, etc.) is 2,836,000, but according to the returns there are only 95,000 Animists So also in Madras, where the idea of ceremonial pollution has been more fully worked out than elsewhere and the fact that certain tribes may not enter the Hindu temples is thus taken to show merely that they carry a greater degree of pollution, than others everywhere recognised as Hindus who, however, are themselves not altogether free from the

* For further details, and an examination of the conflicting claims of the Black and the White Sections the Cochin Census Report may be referred to There is also an interesting account of the Jews of Cochin and their history by Herr Schmidt in his “Reise nach Siam” published at Leipzig in 1894. It appears that the White Jews of Cochin have a tradition that they are descended from a community that wandered eastwards after the destruction of the temple in A.D. 68. They possess a copper-plate deed of grant which they assign to the year 379 but which Burnell thinks cannot be earlier than 774 Their Rabbi has a “history” of which an abstract is given in Herr Schmidt's book There seems to be no doubt that Jews were already on the Malabar Coast in the eighth century and in the tenth century Arab travellers mention Jews in Ceylon Their head-quarters was at Kraganor when the Portuguese settled there, but they were so persecuted by the latter that they went thence to Cochin The persecution, however, continued until the Portuguese were driven out by the Dutch

† Except perhaps in Burma there is no general term in any vernacular corresponding to our word Animist and it was therefore laid down that where a man was neither a Hindu nor a Musalman, Christian, etc., the name of his tribe should be entered in the column for religion. Persons thus shown were tabulated under the head Animistic

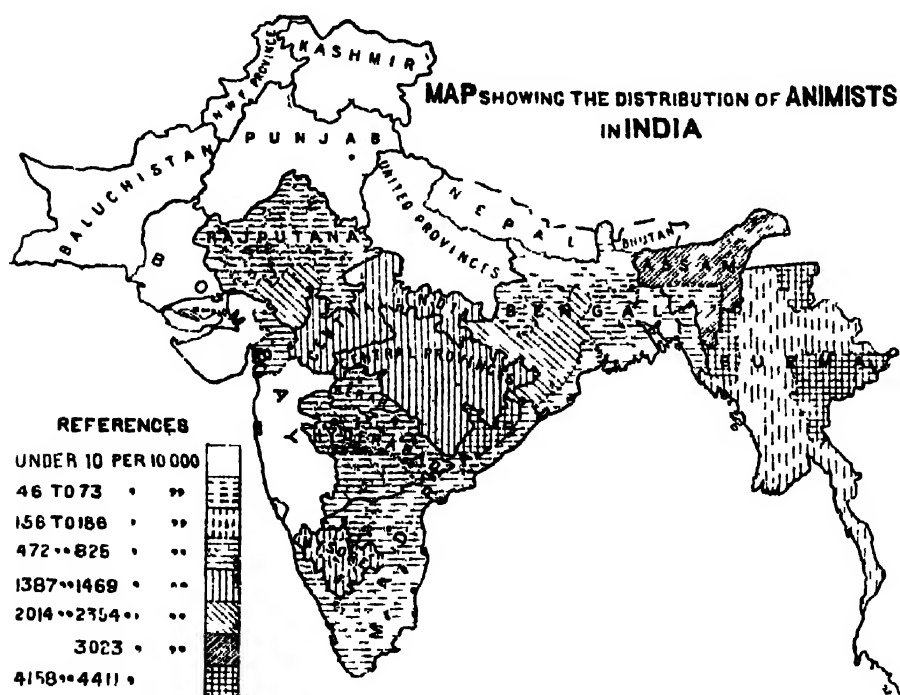
taint of uncleanness. In Bengal the general tendency was to treat the aboriginal tribes as Animists in the places where they are chiefly found, and where their mode of life and the distinctions between them and Hindus were familiar to all, and to show them as Hindus in places at a distance from their tribal headquarters where they were not so well known. Thus in the Sonthal Parganas only one-ninth of the Santáls were shown as Hindus, while in Malda two-thirds of them were so recorded. In the Central Provinces it was laid down that when in doubt, a man should be asked if he worshipped Mahadeo; if the answer was in the affirmative he was classed as a Hindu, and if in the negative as an Animist. The result was that about three-fifths of the members of the recognised aboriginal tribes were shown under the latter head, and the persons thus entered exceeded by 60 per cent the number speaking non-Aryan dialects. In Central India an attempt was made to cut the Gordian Knot by picking out the tribes (12 in number) which seemed to fall within the Animistic category, and classing all others as Hindus, even where the name of the tribe was entered in the column provided for religion. The figures resulting from this procedure may possibly be nearer the truth than they otherwise would have been, but they partake more of the nature of an estimate than of an actual enumeration.

It follows from the above not only that the return of Animists is not correct but also that the degree of error varies greatly in different parts of the Empire. In some parts the tendency is to exaggerate and in others to contract it. The nearest approach to the truth is probably to be found in the figures for Assam, Chota Nagpur in Bengal, the Central Provinces and the Agency Tracts in the north of Madras. Almost everywhere else there are large numbers of persons who might fairly have been treated as Animists but who were not so classed and there are also, as we have seen, very many admitted Hindus whose real beliefs are of the ordinary Animistic type. In the case of Burma, Mr. Lewis says that though the people are for the most part nominally Buddhists and less than 400,000 have been returned as Animistic, the latter is the real faith to which the whole country owns allegiance.*

662. So far as the returns go, the total number of Animists in India slightly exceeds 8½ millions, of whom nearly one-third are found in Bengal, more than one-fifth in the Central Provinces, one-eighth in Assam, one-ninth in the Central India Agency, and one-thirteenth in Madras; the only other tracts with a number exceeding 100,000 are Rajputana, Burma, Berar and Baroda.

In proportion to the total population Animists are most numerous in Assam and the Central Provinces, where they represent one-sixth to one-seventh of the total, in the Central India Agency, where they exceed one-ninth, and in Baroda,

where one person in every eleven is of this persuasion. In Bengal the proportion for the province at large is only 1 in 29, but in the tracts where they are chiefly found it is much higher, and in two districts of Chota Nagpur nearly half the population was thus classed. In Madras the Animists are almost all found in two Agency tracts the north, and in Assam and Burma also the distribution is very uneven. In the annexed map



the areas in each province where Animists are chiefly found have, as far as

* An account of *Nat* worship in Burma will be found in the Report on the present Census of that province, pages 36 and 37

possible, been separated from those where they are less frequently met with. The minor fluctuations from district to district, such as are shown in the map on page 153 of the Bengal Report, are necessarily disregarded, but the main features of the distribution stand out clearly. The chief home of the tribes who still cling to the beliefs which were probably current throughout India at the time of the Aryan invasion is in the barren and sparsely populated tract of hill and jungle, corresponding in extent fairly closely to the natural division described by Mr. Risley as the "East Satpuras," but encroaching eastwards on the "East Coast North" and westwards along the Vindhya range, the home of the Bhils, through the south of the "Central India Plateau," on the eastern extremity of "Gujarat." The only other tracts where they are at all numerous are the outlying Assam range and the hilly country that divides Assam from Burma. The stream of Aryan immigration followed the course of the great rivers, the Ganges and the Indus, and gradually spread all over the open plains and along the coast. The earlier inhabitants of the open country were either subjugated or peaceably converted to Hinduism, or driven back into the less accessible hills and forests, where they have preserved an individuality in respect of tribal organization, language and religion which their congeners in the plains have long since lost.

Conversions
to Hinduism.

663. But even here outside influences are making themselves felt in a constantly increasing degree; the tribal dialects are gradually being replaced by Aryan languages, and the tribal beliefs are giving way to the direct onslaughts of Christian missionaries, and the more insidious, but none the less effective, advances of Hinduism. Of the Christian propaganda an account will be found further on. The way in which Hinduism spreads amongst these rude tribes has often been discussed and it is unnecessary to refer to it at length. It will suffice to quote the following remarks from the Report for Bengal:—

"At the present time two great influences are at work. The first is the contempt shown by the general body of Hindus for their aboriginal neighbours, and their refusal to have any dealings with them. They are spurned as unclean, and gradually come to share the feeling themselves and to take the superior Hindu at his own valuation. The other influence, paradoxical as it may seem, is the cajolery of certain classes of Bráhmans. Degraded members of the priestly caste wander amongst them in search of a livelihood. They commence by reading some religious book, and so gradually acquire an influence which often ends in their obtaining the position of spiritual advisers to the rude inhabitants of the village they have settled upon. In the Orissa States and the Chittagong Hill Tracts, Vaishnava Bairágis, more often than Bráhmans, act as missionaries of a debased form of Hinduism.

"In this way the tendency is spreading, amongst even the wilder tribes, to call themselves Hindus. Thus in Singbhum the Deputy Commissioner reports that some Hos 'style themselves' Hindus and profess to believe in the Hindu gods and goddesses. Some of them have taken to wearing the Bráhmanical thread.' In parts of the Chota Nagpur States, certain Páns call themselves Das and set up as twice-born Hindus, and in Baramba, many Kandhs and Savars, who were returned as Animists in 1891, claimed that since then they had taken to Hindu forms of worship, and were in consequence allowed to be classed as Hindus. In Mayurbhanj some Santáls have accepted the ministrations of Vaishnava preachers and now call themselves Hindus. One of the curious features of the movement inaugurated by the Kharwárs or Santál revivalists was their leaning towards Hinduism. Occasionally, but very rarely, there is a reaction. Mr. Bompas tells me that at the present moment there is a movement of the sort in the Sonthal Parganas, where the women have broken their lac-bangles and taken once more to home-made cloth instead of the imported article."

Comparison
with 1891

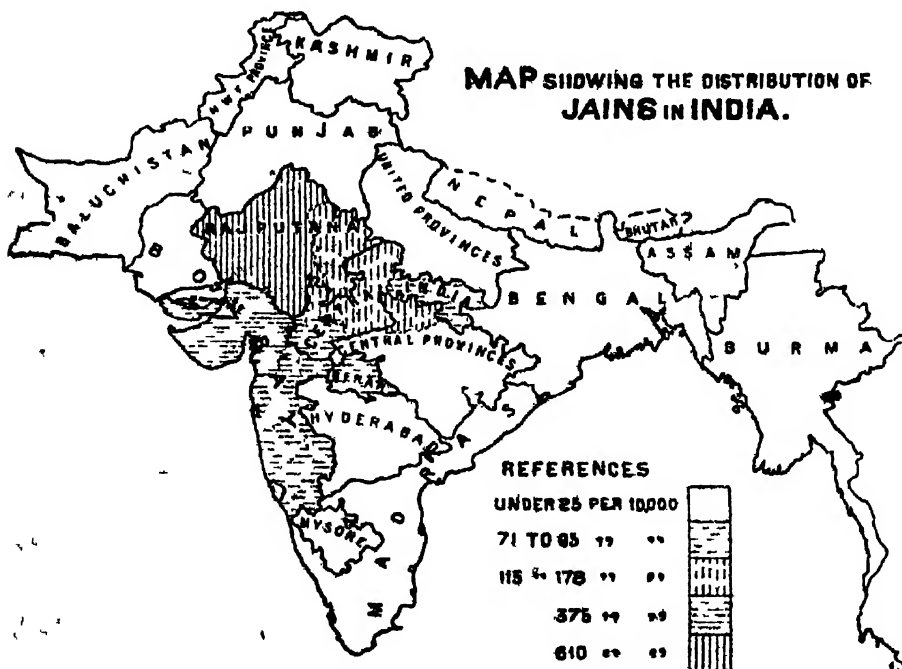
664. Owing to the absence of any definite boundary line between Hinduism and Animism it is impossible to deduce from the census figures an exact measure of the pace at which the process of conversion above alluded to is proceeding at the present time. In Bengal the number of persons returned as Animists is about the same now as it was ten years ago, but in Madras there is an increase of 36 per cent. due, says Mr. Francis, to the line having been more accurately drawn than on previous occasions, and the same explanation accounts for the number having increased sixfold in Baroda and for a considerable increase in Rajputana where 130,000 Bhils were classed as Hindus in 1891. The variation in Central India is due to the arbitrary method of classification already mentioned, while in Bombay the drop from 311 to 95 thousand is explained by the difficulty felt by the enumerators in deciding who were Animists and who were Hindus. In the absence of any change in the standard instructions it may perhaps be assumed that in India as a whole the changes in the system of classification have to a great extent cancelled one another and that the decrease in the number of persons entered as Animists from 9,280,467 to 8,584,148, a drop of $7\frac{1}{2}$ per cent., represents fairly accurately the decline that

has actually taken place,* owing partly to famine, which affected these shy, suspicious, poor and improvident people more than any other section of the population and partly to the inroads of more civilised religions in the manner described above.

665. According to the census there are 2,195,339 Sikhs, of whom all ^{Sikhs} but 64,352 are in the Punjab, and two-thirds of this remainder in the United Provinces and Kashmir which adjoin it. The true number is possibly somewhat greater: the line between Sikhism and Hinduism is very vague and the practical definition adopted at the present census and in 1891 that "a (male) Sikh is one who wears the hair long and refrains from smoking" is said to have resulted in the exclusion from the return of many of the *muna* Sikhs who cut their hair but are generally regarded as Sikhs. On the other hand Mr. MacLagan thought that in 1891 the number shown in the returns exceeded that of true Sikhs by about 30 per cent. In either event it seems clear that the recorded increase of 15 per cent., as compared with 1891, cannot be relied on as showing the actual rate of growth amongst the *Singhs* or followers of the ordinances of Guru Govind. There seems to be a tendency at the present time for Sikhs to regard themselves as a sect of Hindus and to divest themselves of the distinctive character which was so sedulously fostered by Guru Govind and his successors and, in particular, to neglect the ceremony of initiation by baptism with water sprinkled from a two-edged dagger. This tendency, however, is largely counteracted by the martial spirit fostered by Military service in the Sikh regiments, and the first care of the commandants, in the case of new recruits, is to send for initiation all who have not already gone through the rites in question.

666. The total numerical strength of the Jains is $1\frac{1}{2}$ million, according ^{Jains} to the census, but in

many parts they are prone to describe themselves as Hindus and their real number is probably greater. More than two-fifths of the persons who call themselves Jains are found in Bombay and its Native States, including Baroda. Twenty-seven per cent. live in Rajputana including Ajmer, $8\frac{1}{2}$ per cent. in Central India and over 6 per cent. in the United Provinces; the rest are scattered over other parts of India, and are most numerous in the



Punjab, the Central Provinces, Madras, Hyderabad Berar and Mysore. It will be seen from the accompanying map that they are proportionally most numerous in Central and Western Rajputana and in Gujarát and Central India. Their sudden disappearance from the population in the direction of Sind is somewhat remarkable, and so also is the fact that there are no Jains amongst the indigenous inhabitants of Bengal, which includes Bihar, where the religion had its origin, and Orissa, where the caves of Udayagiri and Khandagiri bear witness to its popularity in the early centuries of our era. The sacred hill of Paresnath is situated in Chota Nagpur and the Saraks of that part of the country, though they are now professed Hindus, are believed to be the remnants of a Jain community to whom are attributed a number of ruined temples and various worked-out copper mines, and who are said by Mr. J. F. Hewitt to have established the trade of Tamralipta (from *tamra*, copper), the modern Tamluk, with the tin lands of Malacca.

As compared with the last census the Jains show a decrease of 5·8 per

cent., for which the States of the Rajputana Agency are almost entirely responsible. In these States the decrease in the population at large is 18·9 per cent. and the number of Jains has fallen almost in the same ratio. Considering their general prosperity it seems very improbable that they can have suffered from the famine to anything like the same extent as the general population, and some part of the decline which has taken place must, it would seem, be ascribed to a growing tendency to describe themselves as Hindus. In Bombay there has been some falling off in their numbers and also in Hyderabad, but on the other hand the Central India Agency shows an increase of 25 per cent., which, like the shrinkage in Rajputana, is probably more apparent than real.

Buddhists.

667. There are very few Buddhists in India proper and of the 9,476,759 adherents of this religion all but 292,638 were enumerated in Burma. Of the latter number 237,893 were found in Bengal, including 154,109 on the confines of Burma, in Chittagong, the Chittagong Hill Tracts and Hill Tippera and 70,879 in the Himalayan and Sub-Himalayan area in North Bengal, on the borders of Nepal, Tibet and Bhotan, *viz.*, in Darjeeling, Jalpaiguri, and the Sikkim State; in other parts of Bengal they are for the most part immigrants from China and other foreign countries, and the only professed Buddhists of local origin are found amongst a small colony of Saraks in the Tributary States of Orissa, whose number is less than 1,000 all told. The 9,000 Buddhists of Assam belong to two classes. Those in Lower Assam are mainly temporary cold-weather visitors from Bhotan, while in Upper Assam they are the descendants of small colonies of Shans who have found their way across the Patkoi in comparatively recent times. The Ahoms, who invaded Assam in the early part of the 13th Century, were never Buddhists, and it would thus appear that this religion had not, at that time, penetrated as far as their original home in the Hukong Valley.

The Punjab contains about 7,000 Buddhists in the Himalayan area in the north-east, chiefly in Spiti, Lahul, and Kanawar, where many of the inhabitants are of Tibetan origin. In the Himalayan districts of the United Provinces, which adjoin this tract, Buddhism seems to have well-nigh disappeared. Only 3 have been returned in Garhwal and 217 in Almora; the 568 Buddhists enumerated in other districts are chiefly Burmese prisoners or pilgrims. The 35,000 Buddhists of Kashmir are Bots or Tibetans, and are found mainly in the frontier province of Ladakh.

Buddhist
sects

668. The Buddhists of Burma and the adjoining part of Bengal are generally regarded as belonging to the Southern School, but this is not wholly the case, and the Northern Buddhism has helped to mould the religion of this tract to its present form. It must not, however, be supposed that this is the sole religion of the Burmese. They call themselves Buddhists, but at heart they still adhere to the *Nat*, or demon, worship of earlier times. As Mr. Lewis says:—

“The Burman has added to his Animism just so much Buddhism as suits him and with infantile inconsequence draws solace from each in turn. I know of no better definition of the religion of the great bulk of the people of the province than that given by Mr. Eales in his 1891 Census Report, ‘a thin veneer of philosophy laid over the main structure of Shamanistic belief.’ The facts are here exactly expressed. Animism supplies the solid constituents that hold the faith together, Buddhism the superficial polish. Far be it from me to underrate the value of that philosophic veneer. It has done all that a polish can do to smooth, to beautify and to brighten, but to the end of time it will never be anything more than a polish. In the hour of great heart-searchings it is profitless as the Apostle’s sounding brass. It is then that the Burman falls back upon his primeval beliefs. Let but the veneer be scratched, the crude Animism that lurks below must out. Let but his inmost vital depths be touched, the Burman stands forth an Animist confessed.”

The Buddhists of Nepal are the modern representatives of the debased form of that religion known as the Vajra-Yāna, which in India was swept away by the Muhammadan conquest, and the emigrants from that State to Darjeeling and Jalpaiguri belong to this sect. The Buddhists of Tibetan affinities, on the other hand, are Lāmists not only in Bengal, but also in the Himalayan tracts of the Punjab and the United Provinces and in Kashmir. There are various sub-sects, and it is curious to notice that, according to Mr. Diack, one of those in the Punjab owes allegiance, not to the Grand Lāmā at Lhasa, but to the Dharma Rājā, or spiritual head of the Bhotias of Bhotan.

Variation
since 1891.

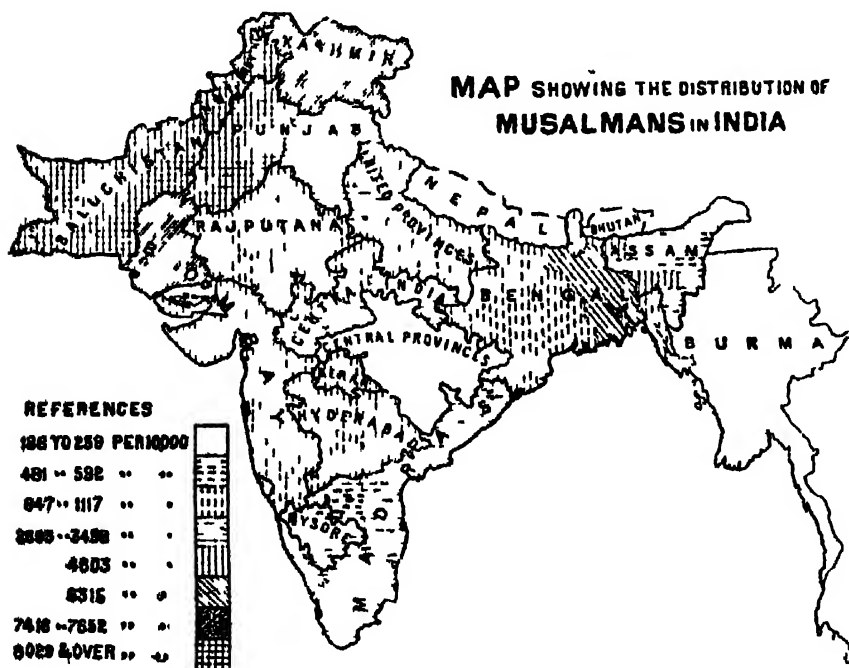
669. The increase of 33 per cent. as compared with 1891 is due to the same causes that have produced the growth of the population of Burma which have already been discussed in Chapter II. The number of Buddhists elsewhere is

insignificant and does not materially affect the general result. The increase of 22 per cent. in Bengal is due mainly to the inclusion of the figures for Sikkim, which was not enumerated by religion in 1891, and to fresh immigration to Darjeeling from the adjoining Buddhist countries. In the Punjab the addition disclosed by the present census is largely artificial. Buddhists have always been known to exist in the Kanawar State, but on previous occasions they did not appear in the return, and were apparently classed as Hindus; even now the figures are incomplete and, in Chamba, at least, some who are really Buddhists, were entered in the schedules as Bhot Hindu and have been classified accordingly. Possibly they are really falling under Hindu influences, as is said to be the case in the Kumaon division of the United Provinces, where Mr. Burn thus explains the decline in their number during the last decade. In the south-east of Bengal also, Buddhism is losing ground, and the following extract from Mr. Risley's account of the Chákmás shows how Hinduism is still attacking the retreating outposts of its ancient rival* :—

"The Chákmás profess to be Buddhists, but during the last generation or so their practice in matters of religion has been noticeably coloured by contact with the gross Hinduism of Eastern Bengal. This tendency was encouraged by the example of Rájá Dharm Baksh Khán and his wife Kálindi Ráni, who observed the Hindu festivals, consulted Hindu astrologers, kept a Chittagong Bráhman to supervise the daily worship of the goddess Káli, and persuaded themselves that they were lineal representatives of the Kshatriya caste. Some years ago, however, a celebrated Phoongyee came over from Arakan, after the Rájá's death, to strengthen the cause of Buddhism and to take the Ráni to task for her leanings towards idolatry. His efforts are said to have met with some success, and the Ráni is believed to have formally proclaimed her adhesion to Buddhism."

670. The total number of Muhammadans is 62½ million or 212 per mille of the population of the Indian Empire. To the total Bengal contributes 25½ million or 41 per cent., the Punjab and Frontier Province 14 million or 22½ per cent. and the United Provinces 7 million or 11 per cent.; Bombay contains only 4½ million, Madras (including Cochin and Travancore) 2½ million, Kashmir 2½, Assam 1½ and Hyderabad 1½ million. In spite of the zeal of Hyder Ali and Tippu Sultan, Mysore contains an exceptionally small number of Muhammadans. In proportion to the total population Islám is most strongly represented in Kashmir where it is the religion of 74 per cent. of the inhabitants; then follow the Punjab with 53 per cent., Bengal with 32, Assam with 26, Bombay with 18 and the United Provinces with 14 per cent. As in the case of Animists, however, the proportions in each province are far from uniform. In Bengal nearly half the total number of Muhammadans are found in East Bengal, where two-thirds of the population are of this persuasion, compared with only 9½ per cent. in South Bihar, 4½ per cent. in Chota Nagpur, and 2½ per cent. in Orissa. In Madras

one-third of the followers of the Prophet are found in the single district of Malabar, where 30 per cent. of the inhabitants are Muhammadans against 6½ per cent. in the Presidency, as a whole†. In Assam considerably more than two-thirds of the Muhammadans were found in Sylhet and in Bombay nearly three-fifths were enumerated in Sind. The accompanying map has been prepared to show these variations, and the localities in the larger



* *Tribes and Castes of Bengal*, Vol. 1, page 172.

† In the Laccadives which are attached to the Malabar district practically the whole of the inhabitants are Muhammadans.

provinces in which the religion is most strongly represented have been marked off from the rest of the provincial area and the proportions in them shown separately. The hatching represents of course the average proportion for each area as a whole, and the changes from district to district are often much more gradual than would seem from the map to be the case. Sometimes, however, as in Malabar, the change in the religious distribution of the people is very sudden.

Origin of
Muhamma-
dan Popula-
tion in
Bengal

671 It is easy to understand why Muhammadans should be found in large numbers in the Punjab and Sind, which lie on or near the route by which successive hordes of Afghán and Moghal invaders entered India, but it is not at first sight apparent why they should be even more numerous in Bengal proper. The answer is that in the east and north of this tract, where the Muhammadans are mainly found, the bulk of the inhabitants belonged to various Mongoloid or Mongolo-Dravidian tribes who had never been fully Hinduized and who, at the time of the first Muhammadan invasion, professed a debased form of Buddhism. The subject has been dealt with at length in the provincial Census Report in which, after a review of the opinions of various authorities, all of whom support the view that the local Muhammadans are in the main the descendants of local converts, it is stated :—

“But the most convincing testimony is that afforded by the exact measurements carried out by Mr Risley. The average Cephalic index (proportion of breadth of head to length) of 185 Muhammadans of East Bengal is almost identical with that of 67 Chandáls. The nasal index (proportion of breadth of nose to height) of the Muhammadans was greater than that of the Chandáls but not very different from that of the Chandáls' half-brothers, the Pods, and in any case a broad nose is characteristic of the Dravidian rather than of the Aryan and Semitic types. These measurements show clearly that the foreign element amongst the Muhammadans of East Bengal is very small. The author of the book already referred to has protested against the manner in which the subjects for measurement were chosen, *i.e.*, against the selection of ordinary cultivators and the exclusion of all Muhammadans of birth, but his protest seems to be based on a misunderstanding. The object of the measurements was to ascertain the affinities of the low class Muhammadans of East Bengal who form the great bulk of the Muhammadan population of that part of the Province. There is no question as to the foreign origin of many of those of the better class, the difference between the coarse features and dark complexion of the ordinary villagers and the fair skin and fine features of some of the gentry is apparent to all, and it was precisely for this reason that instructions were given to exclude the latter from the operations of the Anthropometric survey. There have been no measurements of the Muhammadans of North Bengal, but there seems no reason to doubt that, if they could be taken, they would fully confirm the popular view that they are for the most part very closely allied to the Rájbanis amongst whom they live and whom they closely resemble in feature. * *

“It has already been noted that the affinities of the Muhammadans of East Bengal seem to be with the Pods and Chandáls and those of North Bengal with the Rájbanis and Koches. The conclusion is based, not only on their striking physical resemblance to their neighbours, but also on the fact that the proportion of Hindus of other castes in these parts of the country is, and always has been, very small. The main castes are the Rájbanis (including Koches) in North Bengal and the Chandáls and other castes of non-Aryan origin in East Bengal, so that even if the different groups yielded converts in equal proportions, the absolute number of converts from such castes would be much greater than from others. But, except in the case of forcible conversion, it is not likely that the proportions were at all equal. The Musalman religion, with its doctrine that all men are equal in the sight of God, must necessarily have presented far greater attractions to the Chandáls and Koches, who were regarded as outcastes by the Hindus, than to the Bráhmans, Baidyas and Káyasths, who in the Hindu caste system enjoy a position far above their fellows. The convert to Islám could not of course expect to rank with the higher classes of Muhammadans, but he would escape from the degradation which Hinduism imposes on him; he would no longer be scorned as a social leper, the mosque would be open to him; the Mullah would perform his religious ceremonies, and, when he died, he would be accorded a decent burial. The experience of the Christian missionaries in Bengal at the present day points to the same conclusion. Converts from the higher Hindu castes are rare and it is amongst the non-Aryan tribes of the Chota Nagpur plateau and North Bengal, and amongst the Chandáls of Backergunge, that the greatest success is met with.

“It is not contended that the higher castes did not contribute their quota, but it was undoubtedly a comparatively small one, and obtained usually by force or accident, rather than by a voluntary adhesion to the tenets of the Korán. This seems clearly indicated by the history of Muhammadan families of known Hindu origin. The Piráls, for example, became Muhammadans because they were out-casted on account of having been forced to taste (or smell) forbidden food cooked by a Muhammadan, and they still retain many Hindu beliefs and customs. The Rájás of Kharagpur were originally Khetauris, and only became Muhammadans because, after being defeated by one of Akbar's generals, the acceptance of Islám was made a condition of being allowed to retain the family estates. The present Rájá of Parsouni in Darbhanga is descended from Rájá Purdil Singh, who rebelled against the Emperor and became a Muhammadan by way of expiation. The family of Asad Áli Khán, of Baranban in Chittagong, is by origin a branch of the Srijukta family of Naopara. Their ancestor, Syám Rái Cháudhuri, was deprived of his caste by being forced to smell beef and was fain to become a Muhammadan.

Jadu, the son of Raja Káns, the only Hindu King of Bengal, embraced the Muhammadan religion in order to be allowed to succeed his father. In Buckergunge many Hindus became Mussalmans after the Maghs had passed through their houses and so caused them to be out-casted.

"This leads to the question how far the conversion of Hindus generally was voluntary and how far it was due to force. The Moghals were, as a rule, tolerant in religious matters but the Afgháns who preceded them were often very fanatical. It does not appear, however, that the Afghán rulers of Bengal often used force to propagate their faith, and the only organised persecution of the Hindus is that of Jaláluddin, mentioned by Dr Wisc, who is said to have offered the Korán or death, and who must have effected wholesale conversions. But although there was no general attack on the Hindu religion, there are numerous traditions of conversions on a large scale by enthusiastic freelances, such as the renowned Sháh Jalal of Sylhet. In Mandaran thana in the Arambagh subdivision of Hooghly, where the Muhammadan population preponderates over the Hindu, there is a tradition that Muhammad Ismail Shah Gházi defeated the local Rájá and forcibly converted the people to Islam. These traditions are not confirmed by history, but history tells us very little of what went on in Bengal during the reigns of the independent kings, and, when even the names of some of them are known to us only from the inscriptions on their coins, while there is no record whatever of many of the local satraps, it is not to be expected that, even if forcible conversions were common, there would be any written account of them. There must doubtless, here and there, have been ruthless fanatics like the notorious Tippu Sahib of more recent times, who forcibly circumcised many of his Hindu subjects and perpetrated many acts of the grossest oppression, and the fact that Muhammadan mosques were often constructed of stones taken from Hindu temples, clearly shows that, at some times and in some places, the Hindus were subjected to persecution at the hands of their Musalman conquerors. Several cases in which persons belonging to the higher castes were forced to become Muhammadans have been quoted above, and these are doubtless typical of many others. We read, for instance, in the accounts of Chaitanya's life, that two of his leading disciples were Bráhmans who had been compelled to embrace the faith of Islam.

"In spite, however, of the fact that cases of forcible conversion were by no means rare, it seems probable that very many of the ancestors of the Bengal Muhammadans voluntarily gave in their adhesion to Islám. The advantages which that religion offered to persons held in low esteem by the Hindus, have already been pointed out, and under Muslim rule there was no lack of pious Pirs and Fakirs who devoted their lives to gaining converts to the faith. There were special reasons which, during the early years of the Muhammadan supremacy, made conversion comparatively easy. Although the days when Buddhism was a glowing faith had long since passed, the people of Bengal were still to a great extent Buddhist, and when Bakhtyar Khalji conquered Bihar and massacred the Buddhist monks assembled at Odantapuri, the common people, who were already lukewarm, deprived of their priests and teachers, were easily attracted from their old form of belief, some to Hinduism and others to the creed of Muhammad. The higher castes probably found their way back to Hinduism, while the non-Aryan tribes who had, in all probability, never been Hindus, preferred the greater attractions of Islám.

"The dislike which educated Muhammadans have for the theory that most of the local converts in Eastern and Northern Bengal are of Chandál and Koch origin seems to be due to the influence of Hindu ideas regarding social status, according to which these tribes occupy a very degraded position. This, however, is merely due to the fact that they are of known non-Aryan origin. If, instead of the British, the Hindus had succeeded the Moghals as the paramount power in India, and the Muhammadan faith had gradually grown weak and its votaries had attorned to Hinduism, the Moghals and Patháns would have been given much the same rank as that now accorded to the Chandals and Koches. These tribes were formerly dominant, and it is only because they have lost their political supremacy and have fallen under the yoke of the Bráhmans, that they have sunk to their present low position. In the days of their supremacy they were accorded Kshattriya rank, and it is certain that, if they had maintained their independence, they would no more have been regarded as low castes to-day than are the descendants of the Moghal conquerors of Delhi. They are in fact allied by race to the Moghals, but while they entered India from the north-east, the latter did so from the north-west, and came earlier under the influence of the greatest proselytising religion, next to Buddhism, that Asia has yet seen. The Moghals are converts, just as much as are the Chandals. It is only a question of time and place. The Christian religion prides itself as much on converts from one race as on those from another, and except for the influence of Hindu ideas it is not clear why the Muhammadans should not do so too."

672. In Malabar, the only other tract remote from the north-west of India where the faith of Islám has many adherents, the majority are Mappilas, well known for their fanaticism, and are said to be the descendants of local converts made by the Arabs, who frequented the coast as far back as the beginning of the 8th century and continued to monopolize the trade until ousted by the Portuguese. Their language is Malayálam and many of them still retain the Hindu law of inheritance. Similarly in Gujarat the Bohras, Khojas and Memons are of Hindu ancestry, and in Rajputana the Muhammadans are for the most part "the descendants of Rájputs who were converted in the time of the Delhi Emperors," of the remainder many are Mées, also of indigenous origin.

Even in the north-west of India a large proportion of the present day Muhammadans have little or no foreign blood in their veins, and of 11,141,122

Muhammadans in the Punjab only 1,114,243 were returned as Pathán, 491,789 as Baloch, 340,063 as Shekh, 315,032 as Saiad and 111,885 as Moghal. On the other hand the Játs of this persuasion numbered nearly 2 million, the Rájputs and Aráins about 1 million, and the Joláhás, Awans, Gujars, Muchis, Kumhárs, Tarkháns, and Telis from one to two-thirds of a million each. The vast majority of the present-day followers of Islám are shown by their caste designation to be the descendants of local converts.

Variation
since 1891

673. The followers of the Prophet are more numerous by 8·9 per cent. than they were in 1891, compared with an increase of only 2·4 per cent. in the population of India at large. Their relatively more rapid growth is due to a great extent to the fact that the tracts where they are mainly found, such as North and East Bengal, the Western Punjab, Sind and the Meerut and Rohilkhand divisions of the United Provinces, escaped the stress of famine and show for Hindus also a growth of population much above the average, while the decadent tracts in the Central Provinces, Bombay (excluding Sind), Rajputana and Central India contain very few Muhammadans. This, however, is not by any means the sole explanation, and an examination of the returns for individual provinces and states shows that, except in Assam, where immigration is a disturbing factor, they have everywhere increased more rapidly than their Hindu neighbours*. In Bengal for example their rate of increase is 7·7 per cent. against less than 4 per cent. for Hindus and in East Bengal it is 12·3 against 6·9 per cent.; in the United Provinces it is 6 against 1, and in Madras 9·1 against 6·3 per cent. In Bengal the general result is shared by all Natural Divisions except two, where there has been extensive immigration, and in Madras, the Punjab, and the United Provinces, only one such Division in each forms an exception to the general rule. In Bombay where the Muhammadans have grown by 5 per cent., while the Hindus have decreased by 7 per cent., the result is largely due to the fact already mentioned that the former are found chiefly in Sind which escaped the famine, but there, too, an examination of the variations by locality shows that even in the same area, the Muhammadans are generally the more progressive of the two communities. The phenomenon is not peculiar to the present census, the same result was noticed in several provinces in 1891 and was dealt with at some length by Mr O'Donnell in the Census Report for Bengal. The subject has been further investigated in the Bengal Report on the present Census, and it is shown that it is due only to a small extent to conversions from Hinduism†. Except perhaps on the Malabar coast, where the Máppilas are active and enthusiastic propagandists, this conclusion seems to be of general application. In the United Provinces, for example, Mr Burn says:—

“The most careful enquiry has failed to discover any extensive proselytism in recent times from Hinduism to Islám, though isolated instances certainly occur both by genuine conversion and in the case of men and women who have lost caste.”

674. The distribution by age shows that of 10,000 of each sex in the case of the Hindus only 2,567 males and 2,632 females are under the age of 10, whereas amongst Muhammadans the corresponding numbers are 2,889 and 3,005. The larger number of children in the case of the latter may be due in part to greater care or less neglect, but it must be chiefly attributable to a higher birth-rate. The Muhammadans again are, for the most part, of the same race as their Hindu neighbours, and the difference in their fecundity must, therefore, be due to something in their social conditions rather than to any racial peculiarity. And the main explanation seems to lie in the comparatively higher age at which Muhammadan girls are married, so that fewer females become widows while still capable of bearing children, coupled with the permission accorded to Muhammadan widows to take a second husband. In some parts a large section of the Hindu community also allows widow marriage, while in others the Muhammadans have been much affected by Hindu prejudices on the subject. It is however an undoubted fact that Muhammadan widows do remarry more freely, they most frequently become the wives of widowers or of well-to-do men who can afford to take a second wife who, though primarily a household drudge, also often bears children to her husband. The marriage statistics show that of every 1,000 Hindu women between the ages of 15 and 40, 137 are widows

* In Assam also an examination of the district details shows that in the case of the indigenous population the Muhammadans are growing more rapidly than the Hindus. In Sylhet for example their rate of increase is greater than that for the district at large, although there has been extensive immigration, chiefly of Hindus.

† Bengal Census Report for 1901 paragraph 310, and Appendix II, page x.

compared with only 98 amongst the Muhammadans. Moreover, in the case of the intrigues in which widows so often indulge the Hindu female who thus becomes *enciente* resorts to abortion, while the Musalmāni welcomes the prospect of a child as a means of bringing pressure upon her paramour and inducing him to marry her. Amongst other causes of the more rapid growth of the Muhammadans the most important is, perhaps, that already alluded to, *viz.*, the greater care which they take of their offspring owing to the absence of the various marriage difficulties which so often embarrass the Hindu father of a large family. Their dietary, moreover, is more nourishing and varied and their physique is thus often better. In East Bengal, where their greater prolificness is very noticeable, they are more enterprising and therefore better-off than their Hindu neighbours, and this is also the case in Rajputana, but in the Punjab, where their greater relative growth is equally marked,* the "Muhammadan is assuredly the poorest element in the population" and laments over his shortcomings as a cultivator are a common-place of the local Settlement Reports. In the Madras Census Report for 1891 Mr. Stuart mentioned the comparative seclusion in which Muhammadan women are kept as one of the reasons for their greater prolificness, but it will be shown elsewhere that the natural rate of increase of the Animistic tribes, whose women share all work with the men, is probably quite as great as that of the Muhammadans, and on the whole the main reason for the more rapid growth of both communities as compared with their Hindu neighbours seems clearly to be that a larger proportion of women of child-bearing age are married.

675 The Christian community numbers 2,923,241, of whom 2,664,313 are natives and the remainder Europeans and Eurasians. Of the Native Christians again about two-fifths are Roman Catholics and one-eighth Romo-Syrians, one-ninth belong to the Anglican Communion, one-eleventh are Jacobite Syrians, and one-twelfth are Baptists, of the other sects the best represented are the Lutherans and allied denominations, who claim 6 per cent of the total, the Methodists with 2½ and the Presbyterians with 1½ per cent†. According to the returns the two branches of the Syrian Church (Roman and Jacobite) between them account for more than one-fifth of the total number of Native Christians, but many of those who own allegiance to the Pope have been classed merely as Roman Catholics, without further specification, and the actual number of Christians descended from the Syrian Church is thus far greater than that shown by the figures. The actual number of Christians in each Province and State, irrespective of race, is shown in the map facing this page.

Nearly two-thirds of the total number are found in the Madras Presidency including Cochin, Travancore and its other Native States. In Cochin and Travancore, where the Syrian Church has most of its adherents, nearly a quarter of the entire population profess the Christian faith‡. More than four-fifths of the Christians in Madras proper are found in the eight southernmost districts, the scene of the labours of St. Francis Xavier and of Schwartz, except in Tinnevely where the Anglicans nearly equal them, the great majority are shown as Roman Catholics, but of these many are Romo-Syrians, who have here been merged in the general return of Roman Catholics. Excluding these districts and the City of Madras, Christians are found in large numbers only in three districts in the Telugu country, *viz.*, Kistna, where they consist mainly of Baptists and Lutherans, Nellore, where they are almost wholly Baptists, and Kurnool where the Baptists predominate but there is also a respectable minority of Anglicans. In these districts the results are due almost entirely to the missionary enterprise of the last 30 years.

676 Although it contains little more than one-seventh of the number enumerated in Madras, including Cochin and Travancore, Bengal, with 278,000 Christians, of whom 228,000 are natives, occupies the second place. Of the natives, about half are found in one district, Ranchi, where missions of the Lutheran, Roman Catholic and Anglican sects are busily engaged amongst the aboriginal tribes; the Lutherans who have been at work there since 1846 are the most successful and claim about half the total number of converts, the

* It is greater even than the returns would indicate as Chulhras seem to have been less freely classed as Muhammadans than was the case in 1891.

† The Anglican Communion includes 92,644 "Protestants" whose exact denomination was not ascertained. Of these 54,810 were returned in Travancore, where the majority were probably members of the London Mission. For further details on this point the Title page of Table XVII should be referred to.

‡ In the Minachul Taluk of Travancore the proportion of Christians rises to 55 per cent.

remainder being divided between the Roman and Anglican communities in the ratio of 4 to 1. There is also a fair sprinkling of converts in several other districts of Chota Nagpur, and in a few districts of Central and East Bengal, where the Church Missionary Society and the Baptists are respectively the main proselytising agencies. In Bombay there are 220,000 Christians, of whom 181,000 are natives, in the case of the latter, sect was returned only for 151,000 and of these five-sevenths were Roman Catholics. The largest number of Christians is found in Bombay City, Thana, Kaira, and Ahmednagar. The most important missions are those of the Roman Catholics in Thana and Kanara, of the Salvation Army in Kaira, and of the Church of England and Congregationalists in Ahmednagar. Burma contains 147,000 Christians, of whom 129,000 are natives. More than half of those who returned their sect are Baptists, and Mr. Lewis thinks that most of the 18,000 whose sect was not specified also belonged to this denomination. Its adherents are found chiefly in the districts of the Irrawaddy Delta. The only other sects with a fair number of followers are the Roman Catholic (37,000) and English Church (22,000) both of which are most numerous represented in Yungoo.

There are 103,000 Christians in the United Provinces, of whom 69,000 are natives. Excluding 5,000 who did not further particularize their belief, the most important items are 52,000 Methodists, 28,000 members of the English Church and 11,000 Roman Catholics. They are found chiefly in the north-western districts, from Bareilly and Etah to Meerut on the Punjab border. Of the 72,000 Christians in the Punjab, only 39,000 are natives of the country, these are found chiefly in Sialkot, the Chenab Colony, Gurdaspur, Lahore, Gujranwala and Delhi. Only 23,000 specified their sect and of these five-eighths belonged to the Anglican Communion*. The only other tracts which contribute in any marked degree to the total Christian population are Mysore and Assam, with 50 and 36 thousand respectively, of whom 40 and 34 thousand are natives, in Mysore these are mainly Roman Catholics, while in Assam nearly half have been classed as Presbyterians and between a third and quarter as Baptists. The chief mission in the latter province is that of the Welsh Calvinistic Methodists in the Khasi Hills, who account for almost all the "Presbyterians".

Variation
since 1891.

677. As is only to be expected in the case of a religion with a strong proselytizing agency, the growth of Christianity is far more rapid than that of the general population, and its adherents have risen in number from 1,506,098 in 1872 to 2,923,241 at the present census, or from 1,246,288 to 2,664,313 if Native Christians only are taken into account. The degree of success attending missionary effort at the present day is even greater than would appear from the rate of increase disclosed by these figures. The proportionate growth is retarded by the inclusion of two communities whose numbers are not influenced by the modern propaganda, *viz.*, the Europeans and Eurasians,

who form 6 per cent of the total, and the Syrian Church, the true strength of which, as already explained, far exceeds the 24 per cent. actually shown in the returns. In 1891 the whole of the Roman branch of the Syrian Church was merged in the general return of Roman Catholics; in comparison with that census the two bodies, taken together, show a gain of 15.9 per cent against 26.4 in the case of the English Church, 15.3 for the Baptists, 137.7 for the Lutherans, and 139.4 for the Methodists. The Salvation Army, whose headquarters is at Kaira in Bombay has a muster of nearly 19,000 against only 1,300 ten years ago.

Bengal.

678. In Bengal the number of Native Christians has risen from 86,000 in 1881 and 154,000 in 1891 to 228,000 at the present census, being an increase of 48 per cent. during the last decade and of 164 per cent in the course of twenty years. As compared with 1891 the greatest increase has occurred amongst the aboriginal Mundas and Oraons of Ranchi, where the Lutheran missionaries, who sympathize with them in their disputes with their landlords, and who maintain excellent schools, have raised the number of their converts from 23 to 69 thousand. The number of native Roman Catholics has risen from 78 to 90 thousand, that of members of the Anglican Communion from 29,191 to 35,599

* Includes 9,543 'Protestants,' *vide* paragraph 693.

and of Baptists from 12,956 to 20,307. The two former are spread widely over the province but both are numerically strongest in Ranchi. The following observations on the subject of the classes whence converts are chiefly derived and the results of missionary effort are extracted from the Bengal Report.—

“The classes most receptive of Christianity are those who are outside the Hindu system, or whom Hinduism regards as degraded, and it is for this reason that the missions in the Chota Nagpur plateau have so much greater apparent success than those in the plains, while of the latter, the most flourishing are those whose work lies amongst depressed communities such as the Namasudras of Buckergunge and Paurpun. Amongst the higher Hindu castes, there are serious obstacles in the way of conversion, of which family influence and the caste system are the greatest. By accepting Christianity a man at once cuts himself off from all his old associations and is regarded, even by his own family, as an outcaste. Moreover, the prospect of such an occurrence is viewed with the greatest dread, and when any one is suspected of an intention to become a Christian, the greatest possible pressure is put on him by all his relations and friends, in order to make him change his mind. The inducements to conversion in such a case must be exceptionally strong, and the Catechumen's character must be one of unusual independence, before he will take the final step and allow himself to be baptised.

“The influence of Christian teaching is no doubt far-reaching, and there are many whose acts and opinions have been greatly modified thereby, but amongst the higher castes the number who at the present time are moved to make a public profession of their faith in Christ is very small. At one time there seemed a prospect of numerous converts being gained from the ranks of the educated Hindus, but the efforts of Keshab Chandra Sen and other eloquent Brahmo preachers turned their thoughts and aspirations into another channel.”

One of the oldest missionaries in Chota Nagpur tells me that the movement amongst the aboriginal tribes of that tract towards Christianity is, “purely social.” They look to the missionaries for help in their disputes with their landlords, and they see in Christianity a means of escape from the payment of fines imposed on witches and on those who are supposed to have neglected the demons, and from the persecution to which they would be subjected if unwilling to meet the demands of the *bhuts* and their earthly servants.

679 In Madras, including Cochin and Travancore, the Native Madras Christians of various denominations now aggregate 1,890,677 compared with 1,538,827 in 1891, 1,196,254 in 1881 and 1,108,766 in 1871. Omitting Cochin and Travancore the present number is 998,623, an increase of 19 per cent during the last decade and of 99 per cent since 1871. As already noted, however, the proportionate growth in this Presidency is obscured by the inclusion of the Syrian Christians who, though they have preserved their religion free from serious contamination for many centuries, are not at the present day an active proselytizing body, and the only way to compare the results with those achieved elsewhere is by means of the absolute numerical increment, excluding Cochin and Travancore this amounts to 159,338 (Native Christians only) for the decade just past and to 496,996 in the course of the last 30 years, against only 179,935 in the same period in Bengal. Most of the Madras Christians are in the south, but the most rapid progress at the present day is being made in five districts in the south-east of the Telugu country, where 225,000 persons now profess this religion against only 78,000 twenty years ago. The foundations of missionary enterprise in this part of the Presidency were laid at the time of the famine of 1877-78 when large numbers of converts were made, especially in Kurnool by the American Baptists who have been working there since 1840. Mr Francis says that the converts to Christianity—

“are recruited almost entirely from the classes of Hindus which are lowest in the social scale. These people have little to lose by forsaking the creed of their forefathers. As long as they remain Hindus they are daily and hourly made to feel that they are of commoner clay than their neighbours. Any attempts which they may make to educate themselves or their children are actively discouraged by the classes above them. Caste restrictions prevent them from quitting the toilsome, uncertain and undignified means of subsistence to which custom has condemned them, and taking to a handicraft or a trade they are snubbed and repressed on all public occasions, are refused admission even to the temples of their gods, and can hope for no more helpful partner of their joys and sorrows than the unkempt and unhandy maiden of the *parachéri* with her very primitive notions of comfort and cleanliness.

“But once a youth from among these people becomes a Christian his whole horizon changes. He is as carefully educated as if he was a Brahman, he is put in the way of learning a trade or obtaining an appointment as a clerk, he is treated with kindness and even familiarity by missionaries who belong to the ruling race, takes an equal part with his elders and betters in the services of the church, and in due time can choose from among the neat-handed girls of the Mission a wife skilled in domestic matters and even endowed with some little learning. Now a days active persecution of converts to Christianity is rare, so those who hearken to its

teaching have no martyr's crown to wear, and sheltered, as they often are, in a compound round the missionary's bungalow, it matters little to its adherents if their neighbours look askance upon them. The remarkable growth in the numbers of the Native Christians thus largely proceeds from the natural and laudable discontent with their lot which possesses the lower classes of the Hindus, and so well do the converts, as a class, use their opportunities that the community is earning for itself a constantly improving position in the public estimation.

"But there is, in every district, a limit to the numbers to whom the advantages of espousing Christianity appeal, and as district after district becomes supplied with Missions and those who come within this limit are gradually absorbed, the rate of increase among the community will slowly decline. It has fallen in almost every district during the last decade, and it is improbable that in the next it will keep at the level which it has hitherto on the whole maintained."

680. A somewhat different aspect of the matter is presented by a Madras Missionary of forty years' standing who has been good enough to furnish his views as to the causes of the rapid progress made in recent years. According to him the chief "human causes" are:—

- (1) Antecedent labour, or the cumulative result of the efforts made in previous decades.
- (2) Increased efficiency in Missionary workers, both foreign and native, who are better qualified than at any previous time; the former have studied not only the vernaculars but also Sanskrit literature, and are thus in closer touch with the spiritual perplexities of the Hindus.
- (3) The translation of the Bible into the Vernaculars and its extensive distribution amongst all classes.
- (4) The improved status of the Native Christian community who, by their education, intelligence, and energy have won for themselves a much higher position than they held formerly.
- (5) The spread of western education which has broken down old superstitions and prejudices.
- (6) The help rendered to the needy in famine years which has made them feel that the Christians are their best friends, and that the religion which prompted this help must be the best.
- (7) The impartiality and disinterestedness of the British Government, which has conferred so many blessings on the people and is known to be a Christian Government.

United
Provinces

681. There were only 13,264 Native Christians in the United Provinces in 1881, and there are now no less than 69,288. The number has risen by 200 per cent. during the past 10 years, the increase being greatest in the three western divisions of the province, Meerut, Agra and Rohilkhand, where the American Methodists are directing their efforts mainly to the sweepers and Chamárs, and are, according to Mr. Burn, "satisfied with a lower standard of appreciation of the tenets of Christianity than many other Missions require from their converts." Mr. Burn discusses the attitude of the various classes of the community towards Christianity and the outlook for the future at some length, but the following extracts from his remarks must suffice:—

"With the very lowest classes neither philosophic doubts nor social disabilities have much weight, and the results of the Methodist Mission show that if a high standard is not insisted on converts are easy to obtain. In the early days of Christian Missions it was almost a necessity that the Missions should provide the means of subsistence for their converts, and the result of this is still felt as a hindrance in mission work, and the charge is freely made that converts change their religion for material gain. Such a charge cannot be maintained now when numbers have increased so enormously, while the expenditure of this mission shows a lower rate per head than that of any mission in these provinces. It is, however, obvious that where conversion has been so easy relapses are likely to occur, and there is in fact a wide difference between the statistics of this mission which show between 80,000 and 90,000 members, including probationers instead of 50,000 as recorded in the census.

"Through the kindness of Dr T. J. Scott Principal of the Bareilly Theological College, some statistics of the progress of the Methodist Mission will be found at the end of this chapter. It will be seen from these that the number of converts was increasing so rapidly that instructions had to be issued to the native pastors to use more discretion in baptising people, and the difference between the number of members at the close of any year and the sum of the baptisms in that year and the number of members at the close of the preceding year shows that a considerable number disappear or are struck off * * *

From enquiries made it appears that the customs hardest to change amongst these low caste converts are their old ceremonies at birth, marriage, and death, the belief in spirits and the loathing at contact with sweepers who still practise their old occupation. From one district it was reported that images and shrines of the *Lalgurus* are still resorted to in secret. It would

therefore seem that these numerous conversions somewhat resemble those of Hindus in Eastern Bengal to Islam, with the exception that greater care is taken to instruct and look after the spiritual welfare of the converts. These results constitute a serious problem for the future."

The point which Mr. Burn notices as to the stage at which catechumens are admitted to baptism has an important bearing on the statistics showing the relative degree of success attained by various Missionary bodies and on the permanence and completeness of the work. In the district of Nadia in Bengal the evil effects of the wholesale admission to the Church of many imperfectly converted persons who came under the influence of the missionaries during the famine of 1838 continue to make themselves felt even at the present day.

682. The quota of Native Christians furnished by Bombay has risen from 129,814 in 1891 to 181,319 at the present census. It includes 105,000 Roman Catholics, many of whom are the descendants of the converts made by the Portuguese several centuries ago, who at the present day are ignorant and unprogressive. The remainder is made up of more recent converts to a variety of sects, amongst which the Salvation Army and the Anglican Church take numerical precedence. The greatest growth during the decade has occurred in the Kaira district which contains 25,000 Christians, compared with little more than 2,000 in 1891, and Ahmednagar, where the number has risen from 6 to 21 thousand. In the former district the Salvation Army has rallied more than 11,000 soldiers to its banner, and in the latter the largest accessions are under the heads "Anglican" and "Congregational". These districts were heavily stricken in the famine of 1900, and Mr. Enthoven has shown by an examination of the age statistics that, relatively speaking, there has been a far greater increase at the ages 5 to 15 than at other periods of life. He concludes that :—

"The secret of many of the conversions is to be sought more in the relations which the missionary bodies have been able to establish with the famine waifs in their orphanages than in any general movement in the adult members of non-Christian communities towards accepting the revelation of the Gospel."

The same explanation is given by Mr. J. A. Dalal of the increase from 386 to 7,543 Christians in the Baroda State which adjoins the Kaira district and which suffered equally in the famine year.

683. The rate of growth of the Native Christians of the Punjab and North-West Frontier Province during the decade approaches 100 per cent. and their number now stands at 38,513, compared with only 3,912 in 1881. The formation of the Chenáb Colony, which contains nearly 9,000 Christians, most of whom are doubtless immigrants from other districts, makes it difficult to trace the localities where the greatest progress has been made, and the incompleteness of the sect return of the present census prevents effective comparison in this respect also with the corresponding figures for 1891. Two-fifths of the Native Christians failed to specify their sect and 9,543 contented themselves with the vague statement that they were 'Protestants.' The addition of the latter to the head "Anglican Communion" has caused a large apparent increase in the strength of this sect, and the same circumstance coupled with the relegation of such a large number to the category of the "unspecified" has brought about an apparent decline of nearly 55 per cent. in the ranks of the Presbyterians.

More than one-fifth of the Punjab Native Christians have been returned as of Chuhra origin, but the statistics showing the former castes of converts are incomplete and the real number is much greater. The two districts of Sialkot and the Chenáb Colony contain about half the total number of Native Christians, the Cambridge Mission at Delhi addresses itself mainly to the educated classes of Muhammadans and so do some other missionaries of the Church of England at Lahore and Peshawar. There are at present very few Roman Catholic converts in this Province.

684. In Burma the total number of converts to Christianity has risen from 71,355 in 1881 to 129,191 at the present census. The increase in the last decade stands at 27 per cent. compared with 42 per cent. in the previous one. In the Central Provinces the proportional gain since 1891 is far greater, being nearly 200 per cent., but the absolute increment is comparatively small, and the total number even now is only 18,000, of whom nearly a quarter are Roman Catholics. A gain of 127 per cent. has been obtained during the decade in Assam where there are now 33,595 Native Christians. The Welsh Calvinistic

Methodists in the Khasi Hills have increased from 7 to 17 thousand, and the Baptists, chiefly in the Garo Hills, Goalpara, Kamrup and Sibsagar, now number 10 against less than 4 thousand in 1891. In Rajputana and Central India, a large proportional but small numerical increase is attributed largely to conversions during the famine years. The increase of 32·2 per cent in the number of Christians in Travancore is said by the local Census Superintendent, to be due partly to under-statement in 1891, but it is also in part the result of recent missionary effort, especially by the agents of the London, and the Church, Missionary Societies. The increase of 13 per cent. in Cochin approximates more nearly to that of the population at large and calls for no special remarks.

Parsis or
Zoroastrians

685 Influential and wealthy as they are, the Parsis are still a very small community and their total strength is only 94,000, of whom all but 7,000 are in Bombay, including Baroda which is an enclave of that Presidency. The remainder are scattered all over India, but are most numerous in Hyderabad, the Central India Agency and the Central Provinces. Between 1881 and 1891 they increased by only 5·3 per cent. and the rate for the last decade is still smaller, *viz.*, 4·7 per cent. In connection with the latter figure, however, it must be remembered that in Bombay and Baroda the general population shows a decline of 5 and 19 per cent respectively. Mr Enthoven writes —

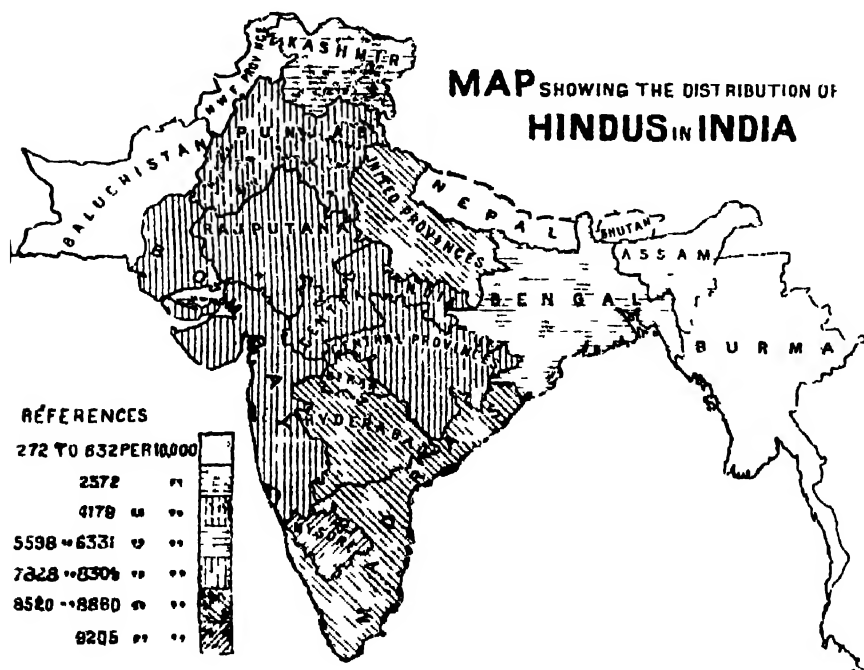
"The Parsis, who number slightly over 78,000, show an increase of 3 per cent on the figures for 1891. In that year, the Provincial Superintendent thought that the rate of increase in the previous ten years, *viz.*, 3 per cent, indicated over-enumeration in 1881, and was abnormally low. The experience of the last ten years does not, however, lend support to his conclusion. Presumably a disinclination to contract improvident marriages, and the late age at which marriages are ordinarily made, are in part the cause of the very low rate of increase in a community which would ordinarily be expected to show more rapid numerical progress owing to the well-known affluence of many of its members.

"In Bombay many of the Parsis retained their sect as either Kadmi or Shensai. The latter adhere to the customary era, whereas the former retain the old Persian era. The distinction, however, is not of great importance, and the figures are not sufficiently comprehensive to be worth publishing."

Hindus

686. Having examined the distribution of all other religions it is needless to dwell at any length on the great Hindu residuum. Hinduism with its 207 million votaries is *the* religion of India. It is professed in one or other of its multifarious forms by 7 persons out of 10, and it predominates everywhere except in the more inaccessible tracts in the heart, and on the outskirts, of India where it has hitherto failed to subjugate the earlier faiths of the rude aborigines, or the rival doctrines based, nominally at least, on the teaching of Sakya Muni, and in certain other tracts where it has been forced to yield to the attacks of Muhammadanism and Christianity. The followers of the Prophet are most numerous in the north-west—in Kashmir, Sind, the North-West Frontier Province and the Punjab, which were overrun by successive hordes of invading Afghans and

Moghals, and in East Bengal, where the Afghans carried on a successful propaganda amongst races who had never been Hindus. The Christian missions date from more recent times and although, as we have seen, they are meeting with marked success in certain directions, the only tracts where the Christians are sufficiently numerous to appreciably affect the proportions are two small States on the west coast where they have been established since very early times. The



general results can best be seen by an examination of the map printed on the previous page in the margin.

687. The number of Hindus is less by about half a million than it was in 1891, and the proportion per mille of the total population is now only 704 ^{Variation since 1891} against 723 at the previous census. The decrease, both absolutely and numerically, is due in part to the circumstance that, generally speaking, the tracts where Hindus are relatively most numerous were smitten hardest by the famine, while those where they are in a minority escaped its ravages, but this is not the only cause of the decline. It has been shown in dealing with the Muhammadans that the growth of the Hindu community is checked by their marriage customs, especially by the prohibition, amongst a large section of the community, of widow marriage, and by the encouragement of the marriage of children. Hinduism is also losing ground by conversions to Islām and Christianity, especially to the latter religion, which has added to its ranks more than 600,000 persons in the course of the last ten years. On the other hand, it is gaining slightly by accessions from amongst the Animistic tribes, and where the number of these tribes is considerable, the gains from this source tend to reduce, even where they do not wholly obliterate, the losses in other directions. But as we have already seen, the border line between Hinduism and Animism is vague, and has never yet been drawn with sufficient uniformity to enable an effective estimate to be framed of the rate at which the former religion is encroaching on the more primitive faiths grouped together as Animistic.

688. There are 92,419 Āryas of whom 71 per cent are in the United Provinces, chiefly in the western districts, and 27 per cent. in the Punjab. The number in 1891 was only 39,952, so that the decade has witnessed an increase of 131 per cent. The gain in the Punjab is only 55 per cent, but in the United Provinces the sect has nearly trebled the number of its adherents. It is recruited almost wholly from the educated classes and the higher castes greatly preponderate amongst its members. In the United Provinces nearly four-fifths of them belong to the castes that rank as twice-born (including the Kāyasths) and in the Punjab also the proportion is very high. In the latter province nearly two-fifths are Khatris. ^{Āryas}

689. The progress of the Brahmo Samāj is far less rapid, and at the present census it claims only 4,050 members compared with 3,051 ten years earlier. More than three-quarters of the total number were enumerated in Bengal. The apparently slow growth seems attributable partly to the circumstance that many who are really Brahmos, other than those of the Sādhiāran Brahmo Samāj sect, prefer to describe themselves as Hindus, and partly to the greater latitude of thought and action allowed by modern Hinduism, especially in the case of persons living in Calcutta and other large towns. There are many Bengali gentlemen who, while observing caste rules strictly in their own homes, do not hesitate to ignore them when living elsewhere, and this neglect, even if known, is tacitly allowed, so long as it is not paraded too publicly.* So far as outward appearances go, the present day tendency amongst the educated classes of Bengal, to whom alone the sect under discussion is likely to appeal, is towards agnosticism or indifferentism in matters of religion and Brahmoism has no special attractions for them when orthodox Hinduism allows them all the latitude they need. ^{Brahmos}

690. The number of Europeans is 169,677 compared with 168,158 in 1891, but that of Eurasians has advanced from 80,044 to 87,030, or to 89,251 if the Feringis of East Bengal are included. The growth is greatest in Bengal (7,952), where it is due mainly to greater success in distinguishing between pure Europeans and persons of mixed descent in Calcutta and to the inclusion under this head of the Feringis of East Bengal, and in three Native States of Southern India—Cochin, Mysore and Travancore (3,971). Bombay, on the other hand, shows a decline of 1,920 and the Punjab of 657. It would be unwise to lay much stress on these variations, as the figures are not very reliable; Eurasians are prone to describe themselves as Europeans, and it seems certain that, while they are probably increasing steadily in number, a considerable part of the gain recorded at the present census is artificial and is due to a greater degree of success in counteracting this source of error. The seeming want of progress in the case of Europeans is due partly to the changes of classification just alluded to and ^{Europeans and Eurasians}

* One of these gentlemen once remarked to me "Hinduism will not reject me so long as I do not reject it." This gentleman is accepted by his caste fellows as a good Hindu but, on a railway journey with me, he had no scruples about sharing my ham and beef sandwiches.

partly to the temporary absence in South Africa of a portion of the European garrison which, as explained in Chapter II, was less by about 7,000 at the time of the present census than it was in 1891. As the figures now stand, Europeans are most numerous in Bombay, the Punjab, including the North-West Frontier Province, the United Provinces and Bengal where their number ranges between 27 and 32 thousand, and then in Madras and Burma where there are 14 and 10 thousand respectively. The distribution depends to a great extent on the location of British troops, who account for 36 per cent. of the total European population,* and are most numerous in Northern India and least so in Bengal, Madras and Assam. Excluding those in Military employ, Europeans are found mainly in large cities. Of the total number in Bengal three-fifths were enumerated in Calcutta and its environs and nearly two-fifths of those in the Western Presidency and Burma were found in Bombay city and Rangoon.

Eurasians bulk most largely in the population of Madras (26,209) and Bengal (20,893); Burma comes third with 8,449 and Bombay fourth with 6,889, and then Mysore and the United Provinces with between 5 and 6 thousand each. The most noticeable feature of these figures is the smallness of the Eurasian population in Bombay and the relatively high figure for Burma, which is a comparatively new possession, and has, until recent years, contained a very small number of Europeans.

More than one-third of the persons returned as Europeans were born in India; the proportion falls to less than a quarter if we exclude children under 15, all of whom may be assumed to have been born in this country, but it again rises to two-fifths if we exclude the army, which may be taken to be wholly English-born. In view of the uncertainty as to the extent to which Eurasians are included in the figures very little value can be attached to these proportions. By nationality ten Europeans in every eleven are British subjects, most of those owing allegiance to other flags are either missionaries or members of foreign trading firms.

Amongst Europeans females are in marked defect and there are only 384 of this sex to every 1,000 males. Up to the age of 15, *i.e.*, amongst those born in the country, there is very little difference in the proportions, but at the age period '15—30,' which includes the bulk of the British troops, males outnumber the opposite sex in the ratio of $4\frac{1}{2}$ to 1 and at '30—50' they are $2\frac{1}{4}$ times as numerous; at the higher ages, the excess is again less marked and amounts only to 50 per cent. Of the males of British nationality no less than 83 per cent are between 15 and 50 years of age, and less than 5 per cent are over 50, compared with 11 per cent. in the population of India at large. The difference is of course due to the circumstance that very few Europeans make their permanent home in India.

691. Distributed by sect two-thirds of the Europeans are shown as members of the Anglican Communion, and one-fifth are Roman Catholics, while only one-seventeenth are returned as Presbyterians. The high proportion of Roman Catholics is perhaps due in part to the inclusion of a certain number of Eurasians and that of the Anglican Communion to the tendency of persons brought up in other denominations to thus return themselves, when personally lukewarm—a tendency which is especially strong in India, where the English Church is often the only place of worship available; the number is also augmented, as explained on the title page of Table XVII, by the classification under this head of persons who described themselves merely as "Protestants;" of the total number of persons entered under the head of "Anglican Communion" more than one-fifth belonged to this category, but details by race are not available. The same causes which have thus swelled the ranks of the Anglican Church have depleted those of the Presbyterians who must in reality be much more numerous than the census returns would indicate.

Of the Eurasians half are Roman Catholics and two-fifths are Anglicans; of the remainder the majority are either Methodists, Presbyterians or Baptists.

* This is exclusive of women and children, officers on the Staff, etc., and also of officers of the Indian Army and their families. These may be estimated roughly at from 15 to 16 thousand more.

SUBSIDIARY TABLE I.

General Distribution of Population by Religion.

RELIGION	1901		1891		1881		PERCENTAGE OF VARIATION INCREASE (+) OR DECREASE (-)		NET VARIATION 1881 TO 1901
	Number	Proportion per 10,000.	Number	Proportion per 10,000	Number	Proportion per 10,000	1881-1901	1881-1891	
1	2	3	4	5	6	7	8	9	10
Indo-Aryan . . .	220,153,272	7,479	218,187,559	* 7,596	195,180,119	7,688	+ 9	+ 11 8	+ 21 971,153
Hindu . . .	207,147,026	7,037	207,731,727	7,232	(1) 188 685 913	7,432	- 3	+ 10 1	+ 18 161,113
(a) Brahmanic . . .	207,050,557	7,034	207,688,724	7,231	188,684,766	7,432	{ - 3 . + 131 3 }	+ 10 1	+ 18,158 210
(b) Arya . . .	92,419	3	39,952	1					
(c) Brahmo . . .	4,050	14	3 051	1					
Sikh . . .	2,195 339	75	1,907,833	67	1,853,426	73	+ 15 1	+ 2 9	+ 311,913
Jain . . .	1,334,148	45	1,416,638	49	1,221,896	48	- 5 8	+ 15 9	+ 112,252
Buddhist . . .	9,476,759	322	7,131,361	248	3,418,881	135	+ 32 9	+ 108 6	+ 6,057,875
Iranian . . .	94,190	3	89,904	3	85,397	3	+ 4 7	+ 5 3	+ 8 793
Zoroastrian (Parsi) . . .	94,190	3	89,904	3	85 397	3	+ 4 7	+ 5 3	+ 8 793
Semitic . . .	65,399,546	2,222	59,622,738	2,076	51 996,228	2,048	+ 9 7	+ 14 6	+ 13 403 318
Musalman . . .	62,458,077	2,122	57,321,164	1,996	50,121 585	1,971	+ 8 9	+ 11 3	+ 12,336,192
Christian . . .	2,923,241	99	2,281,380	79	1,862,631	73	+ 27 9	+ 22 6	+ 1,060,607
Jewish . . .	18,228	6	17,191	6	12,009	5	+ 6 0	+ 13 1	+ 6,219
Primitive . . .	8,584,148	292	9,280,467	323	6 570 092	259	- 7 5	+ 41 2	+ 2,014,056
Animistic . . .	8,584,148	292	9,280,467	323	6 570,092	259	- 7 5	+ 11 2	+ 2,014,056
Miscellaneous . . .	129,900	4	42,763	2	59 985	2	+ 203 7	- 28 7	+ 69,915
Minor Religions and Reli- gions not returned.	(2) 129,900	4	42,763	2	59,985	2	+ 203 7	- 28 7	+ 69,915

(1) Includes Satnami (398,409), Kabir panthi (347,894) and Kumbhipatia 913

(2) Includes 127,011 persons enumerated by estimate in the wilder parts of Burma where religion was not recorded, but probably most of them were Animists

SUBSIDIARY

Proportional strength of the main religions in each Province,

PROVINCE, STATE OR AGENCY	HINDU			SIKH			JAIN		
	Proportion per 10,000 of the population			Proportion per 10,000 of the population			Proportion per 10,000 of the population		
	1901	1901	1901	1901	1901	1901	1901	1901	1901
1	2	3	4	5	6	7	8	9	10
INDIA.	7,037	7,292	7,432	75	67	73	45	49	48
Provinces.	6,860	7,033	7,208	67	63	62	20	22	29
Ajmer-Merwara	7,985	8,076	8,162	5	4	4	418	497	528
Assam	5,597	5,472	6,274	1	...	...	3	3	...
Bengal	6,330	6,407	6,536	...	...	...	1	1	...
(1) Bengal Proper	4,696	4,762	4,873	...	...	...	...	...	...
(2) Bihar	8,250	8,238	8,289	...	...	...	...	...	...
(3) Orissa	9,478	9,540	9,103	...	...	...	...	...	...
(4) Chota Nagpur	6,735	6,674	7,869	...	...	...	...	...	...
Berar	8,671	8,738	9,076	5	1	2	71	65	75
Pomblay	7,651	7,756	7,480	1	1	77	123	127	132
(I) Sind	2,340	1,976	1,264	...	3	526	...	...	...
(II) Gujarat	8,280	8,622	7,866	...	...	...	233	212	229
(III) Rest of the Presidency	8,894	8,860	8,724	...	...	...	130	135	131
Burma	436	306	236	3	1	...	...	...	...
Central Provinces	8,274	8,189	8,102	1	...	...	48	45	47
Coorg	8,849	9,063	9,113	...	...	...	6	7	6
Madras	8,916	8,983	9,143	...	...	...	7	8	8
North-West Frontier and Punjab	3,566	3,711	3,783	688	666	594	19	19	19
United Provinces of Agra and Oudh	8,546	8,614	8,627	3	2	1	17	18	18
States and Agencies.	7,756	7,952	8,299	106	80	115	147	148	122
Baroda State	7,922	8,850	8,480	...	...	...	247	208	214
Bombay States	8,279	8,414	7,962	1	...	...	446	390	406
Central India Agency	8,093	7,496	8,122	3	2	2	131	87	54
Central Provinces States	7,882	7,675	8,652	...	...	...	5	3	1
Cochin State	6,826	6,338	7,152	...	...	...	...	...	...
Hyderabad State	8,860	8,911	9,033	1	4	4	18	24	8
Kashmir State	2,372	2,719	...	89	45	...	1	2	...
Mysore State	9,205	9,384	9,451	...	...	...	25	27	...
Punjab States	5,583	5,851	5,495	1,325	1,127	1,541	16	14	18
Rajputana Agency	8,321	8,483	8,608	2	1	...	352	347	369
Travancore State	6,895	7,318	7,312	...	...	...	...	...	...
United Provinces States	6,966	6,934	6,764	...	...	...	2	3	...

TABLE II.

State or Agency at each of the last three Censuses.

BUDDHIST			MUSALMAN			CHRISTIAN			ANIMIST.			OTHERS		
Proportion per 10,000 of the population			Proportion per 10,000 of the population			Proportion per 10,000 of the population			Proportion per 10,000 of the population			Proportion per 10,000 of the population		
1901	1891.	1881	1901	1891	1881	1901	1891	1881	1901	1891	1881	1901	1891	1881
11	12	13	14.	15	16	17	18	19	20	21	22	23	24	25
322	248	135	2,122	1,996	1,974	99	79	73	292	323	259	8	6	6
400	316	169	2,290	2,215	2,235	81	67	58	273	280	232	9	4	7
	...	..	1,510	1,369	1,255	78	49	48	..	..	.	4	5	3
14	14	14	2,581	2,710	2,698	69	31	14	1,744	1,770	1,006	1		
30	26	22	3,248	3,170	3,122	36	26	18	354	368	296	1	2	6
56	50	43	5,119	5,075	4,976	25	21	20	101	88	86	3	4	2
	..	..	1,470	1,437	1,432	...	..	..	271	318	273	9	7	6
	..	..	177	173	175	..	..	...	334	271	707	11	16	15
	..	..	492	480	481	247	164	82	2,523	2,681	1,520	3	1	48
..	...	...	770	717	702	9	5	5	472	473	139	2	1	1
..	...	.	2,026	1,872	1,834	112	86	84	38	113	342	49	45	49
	...	..	7,619	7,714	7,818	..	..	...		271	356	41	36	36
	...	..	1,089	1,001	1,035	..	..	...	215	94	800	183	71	70
	...	..	782	758	750	132	114	115	9	83	222	53	50	55
8,533	8,680	8,702	609	452	452	237	240	225	281	320	384	1	1	1
..			299	276	280	25	12	12	1,352	1,477	1,559	1	1	
.			756	732	703	204	196	177	183	..		2	2	1
.			642	630	620	269	244	228	166	131	...		4	1
2	3	2	5,693	5,575	5,583	32	26	18						1
.			1,412	1,353	1,343	22	13	11						
6	5	.	1,442	1,208	960	172	125	133	368	477	336	3	5	35
..	..	...	845	781	801	40	3	3	903	124	465	43	31	37
...			1,217	1,060	1,085	16	10	10	36	122	532	5	4	5
...	..	..	613	551	551	9	6	8	1,160	1,857	962	1	1	1
...	..	..	60	55	58	4	2	..	* 2,049	2,265	1,289		...	...
		..	671	642	555	2,441	2,405	2,272	48	.	.	14	15	21
.		.	1,037	987	940	21	18	14	59	25		1	1	1
121	117	...	7,416	7,051	...	1	1						65	
		...	523	512	479	90	77	70	156			1	.	..
6	1	..	3,068	3,006	2,945	2	1	1		.		...	.	.
...	.		951	825	839	3	2	1	371	342	162	...		21
1	..	...	646	621	612	2,362	2,060	2,076	95	...	.	1	1	...
...	1	...	3,026	3,061	3,236	6	1	...	...	...	...	..	...	..

SUBSIDIARY TABLE III.

Distribution of Christians by Locality.

PROVINCE, STATE OR AGENCY	NUMBER OF CHRISTIANS IN			VARIATION		
	1901	1891	1881	1891—1901.	1881—1891. *	1881—1901
1	2	3	4	5	6	7
INDIA.	2,023,241	2,284,380	1,862,634	+ 638,861	+ 421,746	+ 1,060,607
Provinces.	1,935,493	1,516,356	1,175,738	+ 419,137	+ 340,618	+ 759,755
Ajmer-Merwara	3,712	2,683	2,225	+ 1,029	+ 458	+ 1,487
Andamans and Nicobars	486	483	.	+ 3	...	...
Assam	35,969	16,814	7,093	+ 19,125	+ 9,751	+ 28,876
Baluchistan	4,026	3,008	...	+ 1,018	...	...
Bengal (with States)	278,366	192,484	128,135	+ 85,882	+ 61,349	+ 150,231
Berar	2,375	1,359	1,335	+ 1,016	+ 24	+ 1,040
Bombay (with States)	220,087	170,009	145,154	+ 50,078	+ 24,855	+ 74,933
Burma*	133,619	111,982	84,219	+ 21,637	+ 27,763	+ 49,400
Central Provinces (including States) .	25,591	13,308	11,973	+ 12,283	+ 1,335	+ 13,618
Cooch	3,683	3,392	3,152	+ 291	+ 240	+ 531
Madras (including States) . * . .	1,038,854	879,437	711,080	+ 159,417	+ 168,357	+ 327,774
North-West Frontier Province and Punjab (including States)	71,861	53,909	33,699	+ 17,955	+ 20,210	+ 38,165
United Provinces (including States)	102,955	58,518	47,673	+ 44,437	+ 10,845	+ 55,282
States and Agencies.	987,748	768,024	686,896	+ 219,724	+ 81,128	+ 300,852
Baroda State	7,691	616	771	+ 7,045	—125	+ 6,920
Central India Agency	8,114	5,999	7,065	+ 2,115	—1,066	+ 1,049
Cochin State	198,289	173,851	136,361	+ 24,408	+ 37,470	+ 61,878
Hydrabad State	22,996	20,420	13,614	+ 2,567	+ 6,815	+ 9,382
Kashmir State	422	218	Not enumerated.	+ 204	...	...
Mysore State	50,059	38,135	29,249	+ 11,924	+ 8,886	+ 20,810
Rajputana Agency	2,840	1,855	1,294	+ 985	+ 561	+ 1,546
Travancore State	697,387	526,911	498,542	+ 170,476	+ 28,369	+ 198,845

* Refers to Lower Burma only.

SUBSIDIARY TABLE IV.

Distribution of Christians by Race and Denomination.

Denomination	EUROPEAN AND ALLIED RACES		EURASIANS		NATIVES		TOTAL		Variation Per cent
	Males	Females	Males	Females	Males	Females	1901.	1891	
* 1	2	3	4	5	6	7	8	9	10.
INDIA.	122,596	47,081	44,941	44,310	1,344,160	1,320,153	2,923,241	2,284,380	+ 27.96
Abyssinian . . . . .	...	1	...	..	2	6	9	41	—78.45
Anglican Communion	81,588	30,181	18,049	17,732	154,544	151,373	453,462	358,728	+ 26.4
Armenian	600	585	30	22	8	8	1,053	817	+ 28.88
Baptist	1,198	910	923	1,024	110,180	106,735	221,040	191,748	+ 15.27
Calvinist	54	15	..	...	18	11	98	*11	+ 796.9
Congregationalist	215	206	62	78	19,113	18,200	37,874	7,914	+ 378.57
Greek	495	90	27	4	25	15	656	400	+ 64.00
Indefinite beliefs	125	28	11	9	680	654	1,507	208	+ 624.52
Lutheran and allied denominations	953	447	152	135	77,111	76,657	159,455	65,387	+ 137.74
Methodist	4,494	1,504	1,060	1,360	35,759	32,730	76,907	32,121	+ 139.43
Minor denominations	474	190	118	102	11,070	10,745	22,699	3,170	+ 616.05
Presbyterian	7,522	2,171	715	721	21,602	21,197	53,931	46,355	+ 16.34
Quaker	15	15	3	1	731	544	1,309	112	+ 1,068.75
Roman Catholic	28,635	10,329	23,156	22,541	560,188	562,340	1,202,169	1,315,263	+ 15.9*
Salvationist	54	46	6	7	9,766	9,081	18,980	1,286	+ 1,374.34
Syrian (Jacobite and others)	2	1	.	1	126,593	122,144	248,741	200,467	+ 24.03
Syrian (Roman) . . . . .	...	3	...	...	163,607	158,976	322,586	...	...
Denomination not returned	1,177	559	559	570	53,183	48,737	104,785	60,352	+ 73.62

* Calculated on the 1901 figure for Roman Catholics and Roman Syrians combined

SUBSIDIARY TABLE V.

Distribution per 1,000 (a) of each race of Christians by sect and (b) of each sect by race.

SECT	RACES DISTRIBUTED BY SECT				SECTS DISTRIBUTED BY RACE			
	European	Eurasian	Native	Total	European	Eurasian	Native	Total
1	2	3	4	5	6	7	8	9
Abyssinian . . . . .	.	...	...	..	111	..	889	1,000
Anglican Communion	659	401	115	155	246	79	675	1,000
Armenian	6	1	...	...	936	49	15	1,000
Baptist	13	23	82	76	10	9	981	1,000
Calvinist . . . . .	...	..	...	..	704	.	296	1,000
Congregationalist	2	2	14	13	11	4	985	1,000
Greek	4	...	...	..	892	17	61	1,000
Indefinite beliefs	1	...	1	1	102	13	885	1,000
Lutheran and allied denominations	8	3	58	53	9	2	989	1,000
Methodist	35	27	26	26	78	31	891	1,000
Minor denominations	4	2	8	8	29	10	961	1,000
Presbyterian	57	16	16	19	180	27	793	1,000
Quaker . . . . .	..	.	.	...	23	3	974	1,000
Roman Catholic	200	512	421	411	28	38	934	1,000
Salvationist	1	...	7	7	5	1	994	1,000
Syrian (Jacobite and others) . . . . .	...	...	93	85	..	..	1,000	1,000
Syrian (Roman) . . . . .	.	.	121	110	...	...	1,000	1,000
Denomination not returned	10	13	38	36	16	11	973	1,000
Total	1,000	1,000	1,000	1,000	58	31	311	1,000

SUBSIDIARY TABLE VI.

Statistics of Europeans and Eurasians.

PROVINCE, STATE OR AGENCY	TABLE XI.		TABLE XVII					
	NUMBER OF PERSONS BORN IN EUROPE, AMERICA AND AUSTRALIA		EUROPEAN AND ALLIED RACES IN 1901.			Total European and Allied Races in 1901.	EURASIANS.	
	1901	1891	British subjects	Others.	Total.		1901.	1891
1	2	3	4	5	6	7	8	9.
INDIA.	107,298	110,669	154,691	14,986	169,677	168,158	87,930	80,044
Provinces.	94,936	100,024	141,880	13,024	154,904	151,063	73,879	71,877
Ajmer Merwara	605	430	917	92	1,009	838	341	636
Andamans	195	79	269	11	280	316	71	111
Assam	1,409	899	1,969	131	2,099	1,707	975	383
Baluchistan	2,870	2,281	3,452	25	3,477	2,697	124	147
Bengal	13,900	11,781	24,088	3,451	27,489	23,483	20,893	15,162
Berar	156	123	243	83	326	334	301	318
Bombay	19,173	22,894	27,054	4,825	31,879	31,593	6,889	8,809
Butma	6,588	8,332	8,606	1,279	9,885	12,490	8,449	7,022
Central Provinces	3,729	3,049	4,752	168	4,920	4,333	2,304	2,207
Coorg	115	126	212	16	228	269	295	212
Madras	7,285	6,751	12,557	1,465	14,022	13,476	26,209	26,671
Punjab and North-West Frontier	22,591	24,314	30,212	641	30,853	31,026	2,498	3,155
United Provinces	16,320	18,965	27,600	837	28,437	28,011	5,230	7,044
States and Agencies.	12,362	10,645	12,811	1,962	14,773	17,095	13,151	8,167
Baroda State	35	83	80	11	91	152	57	108
Central India Agency	3,888	3,250	3,774	53	3,827	4,136	572	373
Hyderabad State	5,848	3,579	3,147	1,200	4,347	5,268	3,292	2,507
Kashmir State	114	71	189	8	197	134	23	5
Cochin State	85	28	45	10	55	33	1,494	270
Travancore State	300	159	504	30	534	361	1,489	532
Mysore State	2,349	3,199	4,187	566	4,753	6,238	5,721	3,931
Rajputana Agency	293	281	985	84	969	768	503	441

SUBSIDIARY TABLE VII.

Europeans and Eurasians distributed by age.

RACE.	NUMBERS PER 1,000 AGED						REMARKS
	0-15.		15-50		50 and over.		
	Males.	Females	Males.	Females.	Males.	Females.	
1	2	3	4	5	6	7	8.
European and Allied Races, British subjects	120	313	833	603	47	84	
Europeans and Allied Races, others	132	265	761	432	107	108	
Eurasians	371	380	538	523	91	97	

Armenians have been included in "European and Allied Races—others"
Eurasians—exclude 2,221 Feringies (1,115 males and 1,109 females) in Bengal

APPENDIX.

Religious ideas of some Animistic tribes in Bengal.

The religion of the Bágdis is compounded of elements borrowed from orthodox Hinduism Bágdi, and survivals from the mingled Animism and Nature-worship which prevails among the aborigines of Western Bengal. Siva, Vishnu, Dharmaráj (Yama), Durgá, the Saktis, and the myriad names of the modern Hindu Pantheon, are worshipped in a more or less intelligent fashion under the guidance of the degraded (patit) Bráhmans who look after the spiritual welfare of the lower castes. Alongside of these greater gods we find the Santáli goddess Gosáin Erá and Barpahár, the "great mountain" god (Marang Buru) of the same tribe. According to the Bágdis themselves, their favourite and characteristic deity is *Manasá*, the sister of the Snake-king Vasuki, the wife of Jaratkaru and mother of Astiká, whose intervention saved the snake race from destruction by Janmejaya.

Manasá is worshipped by the caste with great pomp and circumstance. On the 5th and 20th of the four rainy months—Ásár, Srában, Bhádra, and Áswín (middle of June to middle of October)—rams and he-goats are sacrificed, rice, sweetmeats, fruit, and flowers are offered; and on the Nagpanchami (5th of the light half of Srában—end of August) a four-armed effigy of the goddess, crowned by a tiara of snakes, grasping a cobra in each hand, and with her feet resting on a goose, is carried round the village with much discordant music, and finally thrown into a tank. The cult of *Manasá* is, of course, by no means confined to the Bágdis. In Eastern Bengal all castes, from the Bráhman to the Chandál, adore her, and no class is more strict in attending to the details of her worship than the Kulin Bráhmans of Bikrampur in Dacca. Bágdis, however, regard her with peculiar respect, and say that they alone among her votaries make images in her honour. Some add that the *púja* has the effect of securing the worshippers from snake-bite, which is naturally more frequent during the rains; and this notion finds a curious echo in the promise given by Vasuki to Astiká in the *Mahábhárata*, that those who call upon his name, be they Bráhmans or common folk, shall be safe from the attacks of the snake race.

On the last day of Bhádra (middle of September) the Bágdis of Manbhum and Bankura carry in procession the effigy of a female saint named Bhádu, who is said to have been the favourite daughter of a former Rájá of Pachete, and to have died a virgin for the good of the people. The worship consists of songs and wild dances, in which men, women, and children take part. The story of its origin may well have some foundation in fact, it being notorious that the Rájás of Pachete, like most of the pseudo-Rajput families of Chota Nagpur, find great difficulty in arranging suitable alliances for their daughters, and often have to keep them at home unmarried until they have long passed the age of puberty. Regarded from this point of view, the legend adds one more to the numerous instances which may be cited in support of the theory propounded by Sir Alfred Lyall in his essay on the origin of Divine Myths in India.

Colonel Dalton has the following remarks on the religion of the Bhuiyás in the Tributary Bhuiyá State of Bonai:—

"They have their own priests, called *deoris*, and their sacred groves called 'deota sarna,' dedicated to four deities—Dásun Pát, Bámoni Pát, Koisar Pát, and Borám. The three first are brethren, but there was some difference of opinion as to whether Bamoni was male or female. Borám is the sun, also worshipped under the name of Dharm Deota, as with the Oráons. The three minor deities are represented by stones in the sarna or sacred grove, but Borám has no representation. Borám, as the first and greatest of gods and as the creator, is invoked at the sowing season with the offering of a white cock. In cases of sickness goats are offered to Dásun Pát and his brethren. On such occasions the goat is given by the owner of the house in which the sick person resides. On other occasions the victim is provided by the community. The sacrifices are all offered at the feet of trees in the sarna; only men partake of the meat. The *deori* gets the head."

The Bhuiyás of Southern Lohardagá have advanced somewhat further on the path of orthodox Hinduism, but do not regularly employ Bráhmans, except, as has been stated above, at the marriage ceremony. On certain occasions, however, Bráhmans are called in to recite *mantras*, and the tendency towards conformity with Hindu usage will doubtless go on spreading as the country is opened up by the gradual improvement of communications. Already Thakuráni Máí, the 'blood-thirsty tutelary goddess,' to whom, only twenty years ago, the Hill Bhuiyás of Keonjhar offered the head of the obnoxious Dewan of their chief, has been transformed, in Singbhum and Lohardagá into the Hindu Durgá, to whom a Bhuiyá priest makes offerings of goats, sheep, etc., which are afterwards partaken of by the worshippers. Changes of this sort raise an impassable barrier against researches into the origin of things, so that vestiges of the earlier beliefs of the people must be sought rather among the gods of the village and of the family than among the recognised *déi majores* of popular worship. Thus the communal ghosts Durhá, Kudrá, Kudri, Dáno, Pacheriá, Haserwár, Pakáhi, with their ill-defined functions and general capacity for mischief and malevolence, are clearly akin to the host of evil spirits which people the world of the Munda and Oráon. To appease these ghosts by occasional offerings of fowls and rice and thus to guarantee the community against the consequences of their ill-will, is the special

function of the village Pahan, who levies small subscriptions for this sort of spiritual insurance. The tribal deities Rikhmun and Tulsibir belong to a different and less primitive type. Rikhmun is believed to be the original ancestor of the tribe; while Tulsibir was a restless and valourous Bhuiyá, who made war upon the gods until they appeased his wrath by admitting him to divine honours. I venture the conjecture that both Rikhmun and Tulsibir are merely transmuted totems, in the hope that further enquiries among the more primitive Bhuiyás may bring out evidence on this point. Neither of these gods has special priests; their worship is conducted by any elder of the tribe. Sheep, goats, pigs, sweetmeats, and wine are the usual offerings, which afterwards furnish a feast for the assembled votaries. Snakes are only worshipped by those families which have lost one of their members by snake-bite. A certain herb, known as *gandhari ság*, and used as condiment, must be worshipped once a year, and can only be eaten if this rule is complied with. The custom suggests that the herb must once have been a totem of the tribe, but this cannot be certainly ascertained to be the case.

Bhumij

The religion of the Bhumij varies, within certain limits, according to the social position and territorial status of the individuals concerned. Zamindars and well-to-do tenure-holders employ Bráhmans as their family priests, and offer sacrifices to Kali or Mahámáyá. The mass of the people revere the sun under the names of Sing-Bonga and Dharm, as the giver of harvests to men and the cause of all changes of seasons affecting their agricultural fortunes. They also worship a host of minor gods, among whom the following deserve special mention:—(1) Jáhir-Buru, worshipped in the sacred grove of the village (*jáhir-tán*) with offerings of goats, fowls, rice, and ghee at the Sarhul festival in the months of Baisakh (April—May) and Phálgun (January—February). The *láyá* or tribal priest presides at the sacrifice, and the offerings are divided between him and the worshippers. Jáhir-Buru is supposed to be capable of blasting the crops if not duly propitiated, and her worship is a necessary preliminary to the commencement of the agricultural operations of the year. (2) Kárakátá, (*Kára* 'buffalo', and *Kátá* 'to cut') another agricultural deity, to whom buffaloes and goats are offered towards the commencement of the rains. The skin of the buffalo is taken by the worshippers; the horns form the perquisite of the *láyá*; while the Doms, who make music at the sacrifice, are allowed to carry off the flesh. In the case of goats, the *láyá*'s share is one-third of the flesh. If Kárakátá is neglected, it is believed there will be a failure of the rains. The cult of this deity, however, is not so universal as that of Jáhir-Buru. (3) Bághut or Bágh-Bhut, who protects his votaries from tigers, is worshipped in Kartík (October—November) on the night of the Amábasyá or the day preceding it. The offerings are goats, fowls, ghee, rice, etc., which may be presented either in the homestead or on the high land (*tánr*) close to the village. In the former case the head of the family officiates as priest; in the latter the *láyá*'s services are enlisted, and he can claim a share of the offerings. (4) Gám-Doota and Deosháli, gods of village life, who ward off sickness and watch over the supply of water for drinking and irrigation of the crops. They are propitiated in Áshár (July—August) with offerings of goats, fowls, and rice, at which *láyás* preside. (5) Buru, a mountain deity associated with many different hills throughout the Bhumij country, and worshipped for recovery from sickness and general prosperity on the first or second Mágh. The head of the family or a *láyá* serves as priest. (6) Kudra and Bisaychandi are malignant ghosts of cannibalistic propensities, whom the *láyás* propitiate in the interests of the community. Private individuals do not worship them. (7) Páñchbahini and Báraólá are local deities worshipped by the Bankura Bhumij in much the same fashion as Jáhir-Buru, the chief difference being that the offerings to Páñchbahini are she-goats and a kind of scent called *mákhághashá*, while only fowls are presented to Báraólá.

Bind

The religion of the Binds, so far at least as it is concerned with the greater gods of the Hindu Pantheon, is equally wanting in individual character, and differs in no material particulars from the vulgar Hinduism of the lower castes of Bihar. The external observances of Bráhmanism have been copied more or less accurately, while the esoteric doctrine, on which the whole body of symbolism depends, is entirely unknown to the votaries of the popular religion. Bráhmans of the Maithil sub-caste preside at the worship of Siva as Bhagavat and of his consort as Jagadamba. Hanumán and the Narsingh avatár of Vishnu are also held in reverence. But these greater gods are worshipped at comparatively rare intervals, and far greater attention is paid to rural godlings, such as Bandi, Sokhá, and Goraiyá, to whom goats, boiled rice, cakes, and sweetmeats of various kinds are offered every Wednesday by the men of each household; the offerings being eaten afterwards by the members of the family and the *deodí* relatives who are connected with the family by reason of their sharing in the same domestic worship. On Mondays and Fridays, in the months of Baisakh and Ásár, the earth-god Bhuia is appeased with sacrifices of goats, sheep, and rice boiled in milk. In Srávan the Páñch Pir receive cakes and rice from the men, women, and children of the caste. Widows, however, may take no part in this rite. Mirá Sáhib, a Mahomedan saint, and Lukmáyi, a vengeful goddess, who burns men's houses with fire, are also worshipped in due season. Twice a year the entire caste make offerings to Tarturwára of *achkhat* rice, flowers, betel leaves, and sweetmeats, which are afterwards divided among the caste brethren. The *kul devatá*, or patron deity of all Binds, is Kási Bárá, about whom the following story is told:—A mysterious epidemic was carrying off the herds on the banks of the Ganges, and the ordinary expiatory sacrifices were ineffectual. One evening a clownish Ahir on going to the river saw a figure rising its mouth from time to time and making an unearthly sound with a conch shell. The loud, concluding that this must be the demon causing the epidemic, crept up and clubbed the unsuspecting bather. Kási Náth was the name of the murdered Bráhman; and as the cessation of the murrain coincided with his death, the low (Hindustani) castes have ever since regarded Kási

Bábá as the maleficent spirit that sends disease among their cattle. Now-a-days he is propitiated by the following curious ceremony:—As soon as an infectious disease breaks forth, the village cattle are massed together and cotton seed sprinkled over them. The fattest and sleekest animal being singled out is severely beaten with rods. The herd, scared by the noise, scamper off to the nearest shelter, followed by the scape bull, and by this means it is thought the murrain is stayed. In ordinary times the Birhors worship Kási Bábá in a simpler fashion, each man in his own house, by presenting flowers, perfumes, and sweetmeats. The latter, after having done duty before the god, are eaten by his votary. Kási Bábá no doubt was an actual person who came by his end, if not exactly as told in the legend, at least in some tragic fashion which led to his being elevated to the rank of a god. In some of the other objects of the rural worship we may perhaps see survivals of the primitive Animism which formed the religion of the aborigines of India before their insensible conversion to Bráhmanism. Some of the tribal deities were, as we know, promoted to seats in the Hindu Pantheon; others, whose position was less prominent and whose hold on the mind of the people was weaker, got thrust into the background as patrons of various rural events.

* * The Birhor religion is, as might be expected, a mixture of Animism and Hinduism. Birhor If questioned on the subject, the Birhors themselves will endeavour in their replies to give prominence to the Hindu elements, and to make themselves out more orthodox than they are, and with singular ingenuity they seek to harmonize the two systems by assigning to Devi the chief place in their Pantheon, and making out the animistic godlings, to borrow Sir Denzil Ibbetson's expressive word, to be her daughters and grand-daughters. Thus, according to Colonel Dalton, an oblong piece of wood, painted red, stands for Mahá-Máyá, Devi's daughter; a small piece of white stone daubed with vermilion for her grand-daughter, Buriá Máí, and an arrowhead for Dudha Máí, Buriá's daughter. A trident, painted red, represents Hanumán, who carries out Devi's orders. The minor gods, whose animistic character has not as yet been disguised by any veneer of Hinduism, are Biu Bhut, worshipped in the form of a raised semi-globe of earth, and Darhá, a Mundáí Oráon deity, represented by a piece of split bamboo some three feet high, stuck slantwise in the ground. The latter is also known as the sipahi or sentry, a term not uncommonly applied to minor gods of this type, and is supposed to be the immediate guardian of the place. A small round piece of wood about a foot long, with the upper part painted red, is called Banhi, goddess of the jungles. Another similar emblem stands for Sugu, a big hill in the south of the Hazaribagh district. Sets of these symbols are placed on either side of their huts to scare off evil spirits, snakes, tigers, and misfortune generally. When a Birhor dies, his body is burned and the remnant thrown, as Birhors say, into the Ganges, but really into any stream that may happen to be handy. For ten days the relatives show their grief by not shaving. On the eleventh they shave and have a feast. Birhors have been accused of eating their dead relations, but the evidence on this point is not convincing, and Colonel Dalton says he has no faith in the story.

The Chakmá profess to be Buddhists, but during the last generation or so their practice Chakmá in matters of religion has been noticeably coloured by contact with the gross Hinduism of Eastern Bengal. This tendency was encouraged by the example of Rájá Dharin Baksh Khan and his wife Kálini Ráni, who observed the Hindu festivals, consulted Hindu astrologers, kept a Chittagong Bráhman to supervise the daily worship of the goddess Káli, and persuaded themselves that they were lineal representatives of the Kshatriya caste. Some years ago, however, a celebrated Phoongyee came over from Arakan after the Rájá's death to endeavour to strengthen the cause of Buddhism and to take the Ráni to task for her leanings towards idolatry. His efforts are said to have met with some success, and the Ráni is believed to have formally proclaimed her adhesion to Buddhism.

Lakshmi is worshipped by the Tungjainyá sub-tribe as the goddess of harvest in a small bamboo hut set apart for this purpose. She is represented by a rude block of stone with seven skeins of cotton bound seven times round it. The offerings are pigs and fowls, which are afterwards eaten by the votaries. Chakmá observe the same worship with a few differences of detail, which need not be noticed here.

Vestiges of the primitive Animism, which we may believe to have been the religion of the Chakmá before their conversion to Buddhism, still survive in the festival called Shongbásá when *sats*, or the spirits of wood and stream, are worshipped, either by the votary himself or by an exorcist (*nyhá* or *naichkurá*), who is called in to perform the necessary ceremonies. The demons of cholera, fever, and other diseases are propitiated in a river-bed or in the thick jungle, where spirits delight to dwell, with offerings of goats, fowls, ducks, pigeons, and flowers. The regular priests have nothing to do with this ritual, which has been condemned as unorthodox.

"At a Chakmá village," says Major Lewin, "I was present when sacrifice was thus offered up by the headman. The occasion was a thank offering for the recovery of his wife from child-birth. The offering consisted of a suckling pig and a fowl. The altar was of bamboo, decorated with young plantain shoots and leaves. On this raised platform were placed small cups containing rice, vegetables, and a spirit distilled from rice. Round the whole from the house-mother's distaff had been spun a long white thread, which encircled the altar, and then, carried into the house, was held at its two ends by the good man's wife. The sacrifice commenced by a long invocation uttered by the husband, who stood opposite to his altar, and between each snatch of his charm he tapped the small platform with his hill knife and uttered a long wailing cry. This was for the purpose of attracting the numerous wandering spirits who go up and down upon the earth and calling them to the feast. When a sufficient number of these invisible guests were believed to be assembled, he cut the throats of the victims with his *dau* and poured a

libation of blood upon the altar and over the thread. The flesh of the things sacrificed was afterwards cooked and eaten at the household meal, of which I was invited to partake."

Of late years Bairági Vaishnavas have taken to visiting the Hill Tracts, and have made a few disciples among the Chakmá. The outward signs of conversion to Vaishnavism are wearing a necklace of *tulasi* beads (*Ocimum sanctum*), which is used to repeat the *mantra* or mystic formula of the sect. Abstinence from animal food and strong drink is also enjoined. I understand, however, that very few Chakmá have been found to submit to this degree of austerity.

Chakmas burn their dead. The body of a man is burned with the head to the west on a pyre composed of five layers of wood, that of a woman on a pyre of seven layers, the head being turned to the east. The ashes are thrown into the river. A bamboo post, or some other portion of a dead man's house, is usually burned with him—probably in order to provide him with shelter in the next world. At the burning place the relatives set up a pole with a streamer of coarse cloth. Infants and persons who die of small-pox or cholera or by a violent death are buried. If a man is supposed to have died from witchcraft, his body, when half burned, is split in two down the chest—a practice curiously analogous to the ancient treatment of suicides in Europe. Seven days after death priests are sent for to read prayers for the dead, and the relatives give alms. It is optional to repeat this ceremony at the end of a month. At the end of the year, or at the festival of *navdnu* (eating of new rice), rice cooked with various kinds of curry, meat, honey, wine, are offered to departed ancestors in a separate room and afterwards thrown into a river. Should a flea, or, better still, a number of fleas, be attracted by the repast, this is looked upon as a sign that the dead are pleased with the offerings laid before them.

Dhimál

In the forty years which have passed since Hodgson published his *Essay on the Kochh, Bodo, and Dhimál Tribes*, the Dhimáls have made a marked advance in the direction of Hinduism. They now insist upon describing themselves as orthodox Hindus, and among their favourite objects of worship are Chháwál Thákur or Gopál Thákur (a form of Krishna), Chaitan, and Nítai (Chaitanya and Nityánanda, the great teachers of Vaishnavism), the Sálagrám or fossil ammonite, and the tulsi-plant (*Ocimum sanctum*). In the Darjiling Terai Dhimál temples may be seen in which Krishna is the central figure, having Chaitanya on his right hand and Nityánanda on his left, while the sacred tulsi is planted in front of the bamboo hut which contains these images. No better illustration could be given of the distance which separates the Dhimál religion of to-day from the simple Nature worship described by Hodgson, to which temples and images were alike unknown. The river-deities of forty years ago seem entirely to have lost their hold on the people, who no longer mention them among the regular gods, though it is possible that they may still drag on an obscure existence as patrons of the village or the household. From the precincts of the recognised tribal Pantheon they have been expelled beyond hope of recall by Káli, Bisahari, Manasá, Bura Thákur, Mahámái, and other celestial personages borrowed from the Hindu system. These adopted gods, however, are worshipped on just the same principle as the spirits of flood and field, whom they have displaced. None of the esoteric doctrines of Hinduism have accompanied the new divinities, who are propitiated for the avoidance of physical ills by much the same offerings as were presented to their predecessors. Thus, to Chháwál Thákur and Chaitanya, plantains, milk, and parched rice are offered, to Káli, buffaloes, goats, and pigeons; to Bisahari, goats, pigeons, and ducks. In this *mélange* of Vaishnavism and Saivism the functions of priest are usually discharged by selected members of the Rájbari caste, called Bámans, to distinguish them from the degraded Brahmans who are occasionally called in to assist in a specially important act of worship. These men, though belonging to the class of Barna-Brahmans and serving the lowest caste of Hindus, would not deign to attach themselves regularly to the Dhimál tribe, and it seems likely enough that the whole of the Dhimáls may be absorbed in the Rájbari caste without ever reaching the dignity of having Bráhmans of their own.

Doms.

The religion of the Doms varies greatly in different parts of the country, and may be described generally as a chaotic mixture of survivals from the elemental or animistic cults characteristic of the aboriginal races, and of observances borrowed in a haphazard fashion from whatever Hindu sect happens to be dominant in a particular locality. The composite and chaotic nature of their belief is due partly to the great ignorance of the caste, but mainly to the fact that as a rule they have no Brahmans, and thus are without any central authority or standard which would tend to mould their religious usages into conformity with a uniform standard. In Bihar, for instance, the son of a deceased man's sister or of his female cousin officiates as priest at his funeral and recites appropriate *mantras*, receiving a fee for his services when the inheritance comes to be divided. Some Doms, indeed, assured me that the sister's son used formerly to get a share of the property, and that this rule had only recently fallen into disuse, but their statements did not seem to be definite enough to carry entire conviction, and I have met with no corroborative evidence bearing on the point. So also in marriage the sister's son, or occasionally the sister (*sawdsin*), repeats *mantras*, and acts generally as priest. Failing either of these, the head of the household officiates. The possible significance of these facts in relation to the early history of the caste need not be elaborated here. No other indications of an extinct custom of female kinship are now traceable, and the fact that in Western Bengal the eldest son gets an extra share (*jukh-angs*) on the division of an inheritance seems to show that kinship by males must have been in force for a very long time past. In Bengal the sister's son exercises no priestly functions; these being usually discharged by a special class of Dom, known in Bankura as Degharis, and in other districts as Dharma-Pandit. Their office is hereditary, and they wear copper rings on their fingers as a mark of distinction. In Murshedabad, on the other hand, most Doms, with the exception of the Báuukiá sub-caste and some of the Ánkuriás, have the services of low Brahmans, who may perhaps be ranked as Barna-Brahmans. The same state of things

appears to prevail in the north of Manbhum. In the Sonthal Parganas barbers minister to the spiritual wants of the caste.

With such a motley array of amateur and professional priests, it is clearly out of the question to look for any unity of religious organization among the Doms. In Bankura and Western Bengal generally they seem on the whole to lean towards Vaishnavism, but in addition to Radhā and Krishna they worship Dharam or Dharma-iā in form of a man with a fish's tail on the last day of Jaishtia with offerings of rice, molasses, plantain, and sugar, the object of which is said to be to obtain the blessing of the sun on the crops of the season. Every year in the month of Baisākh the members of the caste go into the jungle to offer sacrifices of goats, fowls, and sweetmeats to their ancestral deity Kalubir; and at the appointed season they join in the worship of the goddess Bhādu, described in the article on the Bāgdi caste. At the time of the Durga Puja, Bājuniā Doms worship the drum, which they regard as the symbol of their craft. This usage has clearly been borrowed from the artisan castes among the Hindus. In Central Bengal Kali appears to be their favourite goddess, and in Eastern Bengal many Doms follow the *Panth*, or path of Supat, Súpan, or Sobhana Bhagat, who is there regarded as a guru rather than as the progenitor of the caste. Others, again, call themselves Haris Chandis, from Rājā Haris Chandra, who was so generous that he gave away all his wealth in charity, and was reduced to such straits that he took service with a Dom, who treated him kindly. In return the Rājā converted the whole tribe to his religion, which they have faithfully followed ever since.

This is the form of the legend current among the Doms of Dacca. It will be observed that the Chandala of the Māikandeya Purana has been turned into a Dom, and the pious king into a religious reformer. According to Dr. Wise, Haris Chandra is a well-known figure in the popular mythology of Bengal, and it is of him that natives tell the following story, strangely like that narrated in the XVIIIth chapter of the Koran regarding Moses and Joshua. He and his Rām, wandering in the forest, almost starved, caught a fish and boiled it on a wood fire. She took it to the river to wash off the ashes, but on touching the water the fish revived and swam away. At the present day a fish called Kālbasa (*Labeo calbasu*), of black colour and yellow flesh, is identified with the historical one, and no low-caste Hindu will touch it. In Hindustan the following couplet is quoted concerning a similar disaster which befell the gambler Nala, the moral being the same as that of the English proverb—"Misfortunes never come singly".—

"Rājā Nal pai bihat par,
Bhūno machhile jal men tire"

The principal festival of the Doms in Eastern Bengal is the Srāvanma Puja, observed in the month of that name, corresponding to July and August, when a pig is sacrificed and its blood caught in a cup. This cup of blood, along with one of milk and three of spirits, are offered to Nārāyan. Again, on a dark night of Bhādra (August) they offer a pot of milk, four of spirits, a fresh coconut, a pipe of tobacco, and a little Indian hemp to Harī Rām, after which swine are slaughtered and a feast celebrated. A curious custom followed by all castes throughout Bengal is associated with the Dom, and may perhaps be a survival from times when that caste were the recognised priests of the elemental deities worshipped by the non-Aryan races. Whenever an eclipse of the sun or moon occurs, every Hindu householder places at his door a few copper coins, which, though now claimed by the Āchārjī Brāhman, were until recently regarded as the exclusive perquisite of the Dom.

Similar confusion prevails in Bihar under the régime of the sister's son, only with this difference, that the advance in the direction of Hinduism seems to be on the whole less conspicuous than in Bengal. Mahadeva, Kali, and the river Ganges receive, it is true, sparing and infrequent homage, but the working deities of the caste are Syām Singh, whom some hold to be the deified ancestor of all Doms, Rakat Mala, Ghūhal or Gohil, Goarivā, Bandi, Lakeswai, Dihwār, Dak, and other ill-defined and primitive shapes, which have not yet gained admission into the orthodox Pantheon. At Deodha, in Darbhanga, Syām Singh has been honoured with a special temple, but usually both he and the other gods mentioned above are represented by lumps of dried clay, set up in a round space smeared with cow-dung inside the house, under a tree or at the village boundary. Before these lumps, formless as the creed of the worshipper who has moulded them, pigs are sacrificed and strong drink offered up at festivals, marriages, and when disease threatens the family or its live stock. The circle of these *godlings* is by no means an exclusive one, and a common custom shows how simply and readily their number may be added to. If a man dies of snake-bite, say the Magahiyā Doms of the Gya district, we worship his spirit as a *Sāmparyā*, lest he should come back and give us bad dreams, we also worship the snake who bit him, lest the snake-god should serve us in like fashion. Any man therefore conspicuous enough by his doings in life or for the manner of his death to stand a chance of being dreamed of among a tolerably large circle is likely in course of time to take rank as a god. Judging, indeed, from the antecedents of the caste, Syām Singh himself may well have been nothing more than a successful dacoit, whose career on earth ended in some sudden or tragic fashion, and who lived in the dreams of his brethren long enough to gain a place in their rather disreputable Pantheon. Systematic robbery is so far a recognised mode of life among the Magahiyā Doms that it has impressed itself on their religion, and a distinct ritual is ordained for observance by those who go forth to commit a burglary. The object of veneration on these occasions is Sansāri Māi, whom some hold to be a form of Kālī, but who seems rather to be the earth-mother known to most primitive religions. No image, not even the usual lump of clay, is set up to represent the goddess: a circle one span and four fingers in diameter is drawn on the ground and smeared smooth with cow-dung. Squatting in front of this the worshipper gashes his left arm with the curved Dom knife (*katāri*), and daubs five streaks of blood with his finger in the centre of the circle, praying in a low voice that a dark

night may and his designs; that his booty may be ample; and that he and his gang may escape detection.¹

“*Labra movet metuens andiri pulchra Iaverna,
Da mihi fallere, da justo sanctoque videri,
Noctem peccatis et fraudibus objice nubem*”²

Dosádhs

Most Dosádhs, if questioned about their religion, will persistently aver that they are orthodox Hindus, and in proof of this allegation will refer to the fact that they employ Bráhmans and worship the regular gods. In most districts, indeed, degraded Kánaujiá or Maithil Bráhmans serve the caste as priests in a somewhat irregular and intermittent fashion, being paid in cash for his specific acts of worship and for attendance at marriages. Many Dosádhs, again, belong to the Śīl Nārāyaṇī sect, and some follow the *panth*, or doctrine of Kabir, Tulsi Dās, Gorakhnath, or Nānak. This enthusiasm for religion, however, like the Satnāmī movement among the Chāmārs of the Central Provinces, appears to be a comparatively recent development, induced in the main by the desire of social advancement and existing side by side with peculiar religious observances, survivals from an earlier Animistic form of belief, traces of which may perhaps be discerned in current Hindu mythology. Then tribal deity Rāhu has been transformed by the Bráhmans into a Daitya or Titan, who is supposed to cause eclipses by swallowing the sun and moon. Though placed in the orthodox Pantheon as the son of the Danava Viprachitti and Sinhiká, Rāhu has held his ground as the chief deity of the Dosádhs. To avert diseases, and in fulfilment of vows, sacrifices of animals and the fruits of the earth are offered to him, at which a Dosádhs Bhakat or Chatiyá usually presides. On special occasions a stranger form of worship is resorted to, parallels to which may be found in the rustic cult of the Roman villagers and the votaries of the Phœnician deities. A ladder, made with sides of green bamboos and rungs of sword blades, is raised in the midst of a pile of burning mango wood, through which the Bhakat walks barefooted and ascends the ladder without injury. Swine of all ages, a ram, wheaten flour, and rice-milk (*lhu*), are offered up after which the worshippers partake of a feast and drink enormous quantities of ardent spirits.

Another form of this worship has been described to me by Dosádhs of Daibhanga and North Bhágalpur. On the fourth, the ninth, or the day before the full-moon of the months Āshān, Māgh, Phālgun, or Baisákh, the Dosádhs who has bound himself by a vow to offer the fire sacrifice to Rāhu must build within the day a thatched hut (*gahbar*) measuring five cubits by four and having the doorway facing east. Here the priest or Bhakat, himself a Dosádhs, who is to officiate at the next day's ordeal must spend that night, sleeping on the *lusa* grass with which the floor is strewn. In front of the door of the hut is a bamboo platform about three feet from the ground, and beyond that again is dug a trench six cubits long, a span and a quarter wide, and of the same depth, running east and west. Fire-places are built to the north of the trench. On the next day, being the fifth, the tenth, or the full-moon day of the months mentioned above, the trench is filled with mango wood soaked in ghee, and two earthen vessels of boiling milk are placed close to the platform. The Bhakat bathes himself on the north side of the trench and puts on a new cloth dyed for the occasion with turmeric. He mutters a number of mystic formulae and worships Rāhu on both sides of the trench. The fire is then kindled, and the Bhakat solemnly walks three times round the trench, keeping his right hand always towards it. The end of the third round brings him to the east end of the trench, where he takes by the hand a Bráhmaṇ retained for this purpose with a fee of two new wrappers (*dhottis*), and calls upon him to lead the way through the fire. The Bráhmaṇ then walks along the trench from east to west, followed by the Bhakat. Both are supposed to tread with bare feet on the fire, but I imagine this is for the most part an optical illusion. By the time they start the actual flames have subsided, and the trench is so narrow that very little dexterity would enable a man to walk with his feet on either edge, so as not to touch the smouldering ashes at the bottom. On reaching the west end of the trench the Bráhmaṇ stirs the milk with his hand to see that it has been properly boiled. Here his part in the ceremony comes to an end. By passing through the fire the Bhakat is believed to have been inspired with the spirit of Rāhu, who has become incarnated in him. Filled with the divine or demoniac *afflatus*, and also, it may be surmised, excited by drink and *gánja*, he mounts the bamboo platform, chants mystic hymns, and distributes to the crowd *tula* leaves, which heal diseases otherwise incurable, and flowers which have the virtue of causing barren women to conceive. The proceedings end with a feast, and religious excitement soon passes into drunken revelry lasting long into the night.

Next in importance to the worship of Rāhu is that of various deified heroes, in honour of whom huts are erected in different parts of the country. At Sherpúr, near Patna, is the shrine of Gaurai or Goraiyá, a Dosádhs bandit chief, to which members of all castes resort; the clean making offerings of meal, the unclean sacrificing a swine or several young pigs and pouring out libations of spirit on the ground. Throughout Bihar, Sales or Sálús, said to have been the porter of Bhím Sen, but afterwards a formidable robber in the Morang or Nepal Terai, is invoked, a pig being killed, and rice, ghee, sweetmeats, and spirits offered. In other districts Choái Mal is held in reverence, and a ram sacrificed. In Mirzápúr the favoured deity is Bindháchal, the spirit of the Vindhya mountains. In Patna it is either

¹ The whole of this business was acted before me in the Buxar Central Jail by a number of Magahiá Doms undergoing sentence there. Several of them had their left arms scarred from the shoulder to the wrist by assiduous worship of the tribal Iaverna.

² Horace, Epist. 1. 16, 60.

Bandī, Motī Rām, Kārū or Karwā Bīr, Mirān, the Pāñch Pir, Bhanav, Jagdā Ma, Kālī, Devī, Patanesvarī, or Ketū, the descending node in Hindu astronomy, sometimes represented as the tail of the eclipse-dragon, and credited with causing lunar eclipses; while Rāhu, the ascending node, represented by the head of the dragon, produces a similar phenomenon in the sun. In none of these shrines are there any idols, and the officiating priests are always Dosādhs, who minister to the Sūdra castes frequenting them. The offerings usually go to the priest or the head of the Dosādhi household performing the worship, but fowls sacrificed to Mirān and the Pāñch Pir are given to local Muhammadans.

The religion of the Gulghūās appears to be a form of the Animism which characterises Gulghūā the aboriginal races. They worship a host of spiritual powers, whose attributes are ill-defined, and who are not conceived as wearing any bodily form. This at least may be inferred from the fact that they make no images, and that Baktāwarī, the tutelary deity of the Patna Gulghūās, is represented by a small mound of hardened clay set up in an earthen plate. Among their objects of worship we find also Jagdamāī or Devī, Rām Thākūr, Baren, Settī, Gorayā, Bandī, Parameswarī, and Dāk. In Hazaribagh they worship Dānu in the form of a stone daubed with five streaks of red lead and set up outside the house. The offerings made to these deities consist usually of rice, milk, fruit, and sweetmeats, which are afterwards eaten by the worshippers.

In disposing of the dead they have the curious practice of pouring some country spirit into the dead man's mouth and killing a fowl, so that the spirit may be satisfied and may not come back to trouble his relatives with bad dreams. The corpse is then burned and the ashes thrown into a tank.

"The Juāngs appear to be free from the belief in witchcraft, which is the bane of the Juāng Kols, and perniciously influences nearly all other classes in the Jungle and Tributary Mahals. They have not, like the Khairās, the reputation of being deeply skilled in sorcery. They have in their own language no terms for 'god,' for 'heaven' or 'hell,' and, so far as I can learn, no idea of a future state. They offer fowls to the sun when in distress, and to the earth to give them its fruits in due season. On these occasions an old man officiates as priest: he is called Nāgam. The even tenor of their lives is unbroken by any obligatory religious ceremonies."

My own enquiries led me to doubt the accuracy of this account. The Juāngs of Kenujhar worship a forest deity called Baiam, who stands at the head of their system and is regarded with great veneration. Next to him come Thānpātī, the patron of the village, also known to the Savars, Māsūmū, Kalapāt, Basulī, and Basumatī or mother earth. Buffaloes, goats, fowls, milk, and sugar are offered to all of these, and are afterwards partaken of by the worshippers. No regular days seem to be set apart for sacrifice, but offerings are made at seed time and harvest, and the forest gods are carefully propitiated when a plot of land is cleared from jungle and prepared for the plough. In addition to these elemental or animistic deities, the Hindu gods Śiva, Durgā, and Balabhadra are beginning to be recognised, in an intermittent kind of way, by the tribe. Brāhmins as yet have not been introduced, and all religious functions are discharged by the *dehari* or village priest.

Special interest attaches to the religion of the Kadar as representing a comparatively Kadar early stage in the process of conversion to Brāhmanism, which the aboriginal races of Bengal are now undergoing. The real working religion of the caste is in fact pure Animism of the type which still survives, comparatively untouched by Hindu influences, among the Santāls, Mundās, and Orāons of Chota Nagpur. Like these, the Kādars believe themselves to be compassed about by a host of invisible powers, some of whom are thought to be the spirits of departed ancestors, while others seem to embody nothing more definite than the vague sense of the mysterious and uncanny with which hills, streams, and lonely forests inspire the savage imagination. Of these shadowy forms no images are made, nor are they conceived of as wearing any bodily shape. A roughly-moulded lump of clay set up in an open shed, a queer-shaped stone bedaubed with vermilion,—this is all the visible presentment that does duty for a god. Their names are legion, and their attributes barely known. No one can say precisely what functions are allotted to Kārū Dāno, Hardiya Dāno, Sumā Dāno, Pahār Dāno, Mohandūā, Lūlu, Pardona, and the rest. But so much is certain that to neglect their worship brings disasters upon the offender, death or disease in his household, murrain among his cattle, and blight on his crops. In order to avert these ills, but, so far as I can gather, without the hope of gaining any positive benefit from gods who are active only to do evil, the Kadar sacrifices pigs, fowls, goats, pigeons, and offers ghee, molasses, and heads of Indian corn in the *sarna* or sacred grove where his deities are believed to dwell. The priest is a man of the caste who combines these sacred functions with those of barber to the Kādars of the village and neighbourhood. The offerings are eaten by the worshippers. For all this the Kādars, if questioned about their religion, will reply that they are Hindus, and will talk vaguely about Parameswar, Mahādeo, and Vishnu, as if they lived in the very odour of orthodoxy instead of being, as in fact they are, wholly outside of the Brahmanical system. To talk about the Hindu gods is usually the first step towards that insensible adoption of the externals of Hinduism which takes the place of the formal and open conversion which sterner and less adaptive creeds demand. The next thing is to set up Brāhmins whose influence, furthered by a variety of social forces, gradually deposes the tribe's gods, transforms them into orthodox shapes, and gives them places in the regular Pantheon as local manifestations of this or that well-known principle, or delegates them to a decent and inoffensive obscurity as household or village deities. Last of all, if the tribe is an influential one, and its leading men hold land, they give themselves brevet rank as Rajputs.

Kádars burn their dead and bury the ashes at the place of cremation on the second day after death. On the thirteenth day a sort of propitiatory sacrifice is performed, which is repeated after an interval of six months. No periodical offerings are made for the benefit of ancestors in general.

Kandh

Much has been written about the religion of the Kandhs, but the subject can hardly be regarded as having yet been fully cleared up. Major Macpherson's account of the matter ascribes to the Kandhs religious conceptions of a very advanced character, quite out of keeping with their primitive social organisation, and one is inclined to suspect that the persons from whom he derived his information must have described to him rather their ideal view of what the religion of the tribe ought to be than what it actually was. For this reason instead of entering upon a lengthy discussion of the subject as treated by him, and endeavouring by analysis and comparison with the beliefs of cognate tribes to get at the actual facts underlying his account, I prefer to state very briefly what is known about the Kandhs of the Kandhmals, trusting to future research to work out the problem in fuller detail.

The Kandhs of the Kandhmals recognise three principal gods—Dharma Pennu, Sâru Pennu, and Taru Pennu. The functions of Dharma Pennu appear to be of a somewhat more general character than those assigned to the other two. No regular times or seasons are fixed for his worship, and he is appealed to only in cases of illness or at the birth of a first child. His worship is performed by a *guru* who may be of any caste, but is usually either a Kandh or a Pan. The *gurus* usually have the power of throwing themselves or feigning to throw themselves into a state of hypnotic trance, and are supposed to be able to cure diseases by touching people, tying them up with bits of thread, and similar mummery. On the whole Dharma Pennu may best be described as the god of the family and of the tribe itself. Sâru Pennu is the god of the hills, a divinity apparently of much the same type as the Marang Bunu of the Santâls and Mundâs. He is a jealous god, and does not like people to trespass on his domain, and the chief object of the worship which is performed in his honour in April and May is to induce him to protect from the attacks of wild animals people whose business takes them among the forest-clad hills of the Kandhmals, and also to secure a full yield of the jungle products which the Kandhs, like most similar tribes, use so largely for food. The priests of Sâru Pennu are called *dehuni*, and the appropriate offerings are a goat and a fowl with rice and strong drink. The offerings are partaken of by the worshippers. Taru Pennu, the earth god, takes the place among these Kandhs of Târu Pennu, the earth goddess, familiar to students of the voluminous official literature which treats of the suppression of human sacrifice among the Kandhs. He is believed to be very vindictive, and to wreak his anger upon those who neglect his worship, afflicting them with various diseases, destroying their crops, and causing them to be devoured by tigers and leopards. In order to avoid these evils the Kandhs offer buffaloes and goats to the god at irregular intervals, apparently whenever they think that he stands in need of being appeased. His priests are called *ghankar*, and the person who actually sacrifices the animals is known as *jani*. The functions of the *dehuni*, the *ghankar* and the *jani* are hereditary.

Kharîâ

The religion of the Kharîâs may be defined as a mixture of Animism and nature-worship, in which the former element on the whole predominates. As the nominal head of their system we find Bai Pahâr, to whom buffaloes, rams, and cocks are offered at uncertain intervals. He seems to be a *fainéant* sort of deity, who brings neither good nor ill-fortune to men, and is not in charge of any special department of human affairs. He has no Kharîâ name, and it is possible that the practice of worshipping him may have been borrowed from the Mundâs and Orâons. The working deities of the Kharîâ Pantheon are the following—(1) Dorho Dubo, who delights in muddy places and takes care of the *dârhâs* or springs of water, which are a notable feature in the Lohandagâ district. Pigs, goats, and red fowls are the offerings set apart for him. (2) Nasân Dubo, the god of destruction, who scatters death and disease abroad, and must be propitiated with sacrifices of five chickens. (3) Giring Dubo, the sun, whom Colonel Dalton mentions under the name of Bero, adding that "every head of a family should during his life time make not less than five sacrifices to this divinity, the first of fowls, the second of a pig, third of a white goat, fourth of a ram, and fifth of a buffalo. He is then considered sufficiently propitiated for this generation, and regarded as an ungrateful god if he does not behave handsomely to his votary." In praying to Bero they address him as 'Parameswar,' the Hindi word for God. The Ho term 'Sing bongâ' they do not know. The sacrifices are always made in front of an ant hill, which is used as an altar. This peculiar mode of sacrificing has fallen into desuetude among the Hos and Mundâs; but on my making some enquiries on the subject from old men of those tribes, I was informed that it was orthodox, though not now generally practised.¹ (4) Jyolo Dubo, the moon—offering, a black cock. (5) Pat Dubo, a god who loves rocky places—offering, a grey goat or reddish-brown fowls. (6) Donga Dârhâ, a hill god—offering, a white goat. (7) Mahâdân, another hill god, to whom rams are sacrificed. (8) Gum, the god who lives in the *vanâ* or sacred grove, which serves as temple for most of the aboriginal deities—offering, a sow. (9) Agin Dârhâ, the protector of the rice crop—offering, a white goat. (10) Kârâ Sainâ, the god of cattle-disease, to whom buffaloes are sacrificed on the occasion of an outbreak.

Kharîâs have not yet attained to the dignity of employing Brahmans for religious and ceremonial purposes, but have priests of their own, called Kalo, whose office is usually hereditary. They also avail themselves of the services of the village Pahan, who is usually a Mundâ or an Orâon. In their funeral rites they observe a curious distinction, the bodies of

¹ Ethnology of Bengal, p. 159

married people are burned, while persons who die unmarried are buried. When cremation is resorted to, the bones and ashes of the dead are put into a new earthen vessel with some parched rice and thrown into the deepest pool of a river, or, should there be no river near, into a rocky chasm or a tank in the *bhūinhāri* village of the deceased, that is to say, the village in which he ranks among the descendants of the original cleaver. If this village cannot be traced, the ashes may be thrown into any tank that is near, only in that case a feast must be given to the *bhūinhāris* of the village, and a *sidhā* of rice presented to the landlord. The relations and friends of the deceased are entertained at a feast and a tall slab of unhewn stone is set up near his house, before which daily oblations are supposed to be offered in order to appease his spirit and avert the danger of his returning to trouble the living.

"The Kharwárs," says Colonel Dalton, "observe, like the Kols, triennial sacrifices. Every three years a buffalo and other animals are offered in the sacred grove, 'sarni,' or on a rock near the village. They also have, like some of the Kols, a priest for each village, called *pāhā*. He is always one of the impure tribes—a Bhuiya, or Kharwár, or a Parheya, and is also called *baiga*, and he only can offer this great sacrifice. No Bráhmancial priests are allowed on these occasions to interfere. The deity honoured is the tutelary god of the village, sometimes called Duúr Pahár, sometimes Dharti, sometimes Purgahari or Daknai, a female, or Dura, a sylvan god, the same perhaps as the Darhá of the Kols." In Saigújá a village of Kharwárs was found employing a *baiga* of the wild Korwa tribe to offer sacrifices in the name of the village every second year to Chindol, a male spirit, Chanda, a female spirit, and to Patvin. Buffaloes, sheep, and goats were offered to all of these. These people made no prayers to any of the Hindu gods, but when in great trouble they appealed to the sun. The apparent anomaly of their having a Korwá for their priest was explained by the belief that "the hill people, being the oldest inhabitants, are best acquainted with the habits and peculiarities of the local spirits, and are in least peril from them; besides, they are wholly pagan, whilst the people in whose behalf they make offerings, having Hindu and Bráhmancial tendencies, could only offer a divided allegiance to the sylvan gods, which it might not be safe to tender."

The main body of the tribe, and particularly those who belong to the landholding class, profess the Hindu religion, and employ Sakadwipi Bráhmans as priests. Mahadeo and Sitaram are the popular deities, Gauri and Ganesh being worshipped during marriages. In addition to these, the miscellaneous host of spirits feared by the Mundás and Oraons are still held in more or less reverence by the Kharwárs, and in Paláman members of the tribe sometimes perform the duties of *pāhan* or village priest. Sráddh is performed ten days after death, and once a year in the month of Aswin regular oblations are made for the benefit of deceased ancestors in general.

Of their religion little is known. According to Colonel Dalton the Korwás of Saigúja Korwa sacrifice only to the spirits of their ancestors, and as this must be done by the head of each family, they have no priests. In Jashpur, on the other hand, Baigas serve them as priest, and the Khuria Rani, a bloodthirsty goddess, dwelling in a cave overhanging a stream, is worshipped with offerings of slain buffaloes and goats. The families of the Dewan of Jashpur and the Thakur of the Kallia estate—the only Korwás who now hold any considerable landed property—affect to have adopted Hinduism and "spurning alliances with the ordinary Korwás have continued inter-breeding for several generations," although "they dare not altogether disown the spirits of the hills and forests that their ancestors adored, and they have each at their head-quarters a Korwá Baiga or pagan priest to propitiate the gods of the race."

In Chota Nagpur and Orissa the Kurmis are in an early stage of religious development. The animistic beliefs characteristic of the Dravidian races are overlaid by the thinnest veneer of conventional Hinduism, and the vague shapes of ghosts or demons who haunt the jungle and the rock are the real powers to whom the average Kurmi looks for the ordering of his moral and physical welfare. Chief among these is Bai-Pahár, the mountain deity of the Santáls, Gosain Rái, perhaps a variant of Gosain Eriá, Ghát, any striking hill pass, such as the Dhangará Pass, near Chatra, which figures in the early traditions of the caste, Gáioái, who watches over cows; Grámeswarí, the patron goddess of the village, Kinchekeswarí, Boram-devi, Sât-bahani; Dakum Buri, and Mahámái. The functions and attributes of these deities are not susceptible of close definition, and the worshippers seem to be conscious of little more than a vague notion that by sacrificing goats, sheep, fowls, etc., and offering libations of rice-beer, certain material calamities, such as disease and bad harvests, may be warded off. In this worship Brahmans usually take no part, and either the head of the household officiates or a professional hedge-priest (*dehars* or *láyá*) is called in, but to this rule there is a curious exception in the Bámangháti paigana of Moharlhavij, where Brahman priests offer fowls to the goddess Kinchekeswarí on behalf of her Kurmi votaries. Jitibahan, again, a deity whose attributes I cannot ascertain, is said to be worshipped only by women, assisted by degraded Brahmans. In respect of the employment of Brahmans, the practice of the Kurmis of Chota Nagpur and Orissa is by no means uniform. In Midnapur they call in the assistance of Bráhmans on all religious and ceremonial occasions, but these priests are held to be degraded by rendering this service, and are not received on equal terms by other members of their own order. In Manbhum, Lohardagá, and Moharlbanj Bráhmans assist only in the funeral ceremonies of the caste, and all other religious functions, including marriage, are discharged by the eldest Kurmi who is present at the time. The Moharlbanj Kurmis affect to get their Brahmans from Sikharbhum, and some of these claim to be of the Raui sub-caste, though such pretensions would of course not be recognised by the Brahmans of Bengal.

Most Lepchas at the present day profess to be Buddhists, and follow in a more or less intelligent fashion the observances of the northern sect of that religion. It is clear, however, that at

no very distant time their sole belief was a form of Shamanistic Animism of the same general character as that described in the article on the Limbus. Conspicuous traces of this faith still survive among them, imperfectly hidden by the thin veil of Buddhistic usage. In the belief of the average Lepcha, mountain and forest, rock and stream represent ill-defined but formidable powers who threaten mankind with a variety of physical ills, and require to be constantly appeased through the agency of Bijus or exorcists. Not all of these powers are evil, and some are even credited with taking a kindly interest in human affairs. But savage theology, expressing doubtless the experience of primitive man as to the distribution of good and evil in the world, teaches that the good gods abide in their own place and take no heed of mankind, while the malevolent deities are in constant state of jealous and mischievous activity. The former therefore gradually drop out of notice and fade from the memories of men, while the latter, strong in the fears they inspire, may even outlive an entire change of religion on the part of their votaries. The snow-clad giant Kinchinjunga, chief among the elemental deities of the Lepchas, who vexes men with storm and hail and sends down avalanches and torrents to wreck their fields and sweep away their homes, has been translated to the milder system of Buddhism, where he figures as the tutor of Sakya Muni himself. Eshegenpu, Palden Lhamo, Lapen-Rimbuchi, Genpu Maling-Nagpu, and Wasungma are less easy to identify, but the fact that they receive offerings of meat and *maruá* beer in addition to the flowers, fruit, rice, and incense sanctioned by Buddhist usage, lends some weight to the conjecture that they belong to an earlier and more barbarous system. Chuenzi or Lachen-Om-Chihup-Chhimu is said by the Lepchas to be the same as Mahadeva. His wife is Umadeva. Both are believed to have been worshipped by the Lepchas before the introduction of Buddhism.

Tibetan Lamas serve the tribe as priests, and preside at all Buddhist ceremonies. Lepchas themselves rarely become Lamas, but many of them are exorcists (Bijus or Ojhas), and exercise considerable influence by their power of averting the ill-will of the gods and appeasing the spirits of the dead.

The dead are usually buried, fully clothed and in a sitting position, facing towards the east. Before burial the corpse is kept sitting in the house for two or three days with food before it. The grave is lined with stones and a round cairn built on the top surmounted by a flag. Among the Krong Lepchas an Ojha is called in about a month after death to perform a simple propitiatory rite, at which a cow or a goat is killed and much *maruá* beer is drunk. This is sometimes repeated on the first anniversary of the death. The object is to put the dead man's spirit to rest, and to prevent him from plaguing the living with bad dreams. At harvest time offerings of rice, *maruá* beer, and various kinds of food are presented by the head of the household for the benefit of ancestors in general.

The higher classes of Khamba Lepchas burn their dead, pound the fragments of the bones which remain, and throw them into a river, not into a *phorá* or hill stream. The subsequent propitiatory ceremony is sometimes very elaborate, as in the case of the obsequies of the sister of the Sikkim Raja, described by Sir John Ware Edgár, C S I, in the following passage¹—

"Before the figure [meant to represent the dead person, in this case the Sikkim Raja's sister, who was a nun] was a table on which were different kinds of food, on another table at the side were various things which had belonged to the woman when alive; while on a third, 108 little brass lamps were arranged in rows. Long lines of monks in dark red robes and with very tall caps of bright crimson on their heads sat on carpets placed in the middle of the chapel and chanted litanies throughout each day of my stay at Toomlong.

"It chanced that I saw the conclusion, and learned the meaning of this ceremony at Pemí ongchi, where the lay-figure of the nun was taken some days after I left Toomlong. There for three days the figure was seated before the altar, and the monks chanted the litanies for the departure of the soul of the dead nun * * *. On the third day the relations, friends, and dependents of the deceased brought or sent gifts of food or clothing or money, which were all laid before the figure of the dead woman, while the head Lama, standing in front of his chair and turning towards the figure, stated the nature of each gift and the name of the donor. Towards evening the tea-cup of the nun was freshly filled with tea and her *murwa* jug with *murwa* and all the monks solemnly drank tea with her. Then many people who had known and loved the nun when alive went up, and, prostrating themselves before the figure, kissed the hem of the robe as a last farewell, while the monks chanted the litanies more zealously than ever, and the head Lama, who had left his chair and gone to one of the tables, went through some elaborate ceremonies the meaning of which I could not make out. At about nine o'clock the chanting ceased, and the Lama again standing in front of his chair made a long speech to the soul of the nun in which he told her that all that could be done to make her journey to another world easy had been done, and that now she would have to go forth alone and unassisted to appear before the king and judge of the dead * * *. When the Lama had finished his address, some of the monks took down the lay-figure and undressed it, while others formed a procession and conducted the soul of the nun into the darkness outside the monastery, with a discordant noise of conch-shells, thigh bone trumpets, Tibetan flutes, gongs, cymbals, tambourines, drums, and other most disagreeable but nameless instruments."

The phlegmatic and utilitarian habit of mind which a German ethnologist has noticed as characteristic of the Mongolian races comes out conspicuously in the nonchalant attitude of the Limbus towards religion. Where their surroundings are Hindu, they describe themselves as Saivas, and profess to worship, though with sparing and infrequent observance, Mahadeva and his consort Gaumi the deities most favoured by the lax Hinduism of Nepal. In a Buddhist

Limbu

¹ Report of a Visit to Sikkim, pp. 57—58.

neighbourhood the yoke of conformity is still more easy to bear: the Limbu has only to mutter the pious formula, *om mani padme om*, and to pay respect and moderate tribute to the Lamas, in order to be accepted as an average Buddhist. Beneath this veneer of conformity with whatever faith happens to have gained local acceptance, the vague shapes of their original Pantheon have survived in the form of household or forest gods, much in the same way as Dionysus and other of the Greek gods may be traced in the names and attributes of the saints who preside over the vintage, the harvest and rural festivals of various kinds in remote parts of Greece at the present day. Under such disguises, which serve to mask departures from the popular creeds, the Limbus worship a host of spiritual beings whose attributes are ill-defined, and whose very names are not easy to ascertain. Yumá, Kápobá, and Thebá rank as household gods, and are propitiated once in five years, or whenever disease or loss of property threaten the family, by the slaughter, outside the house, of buffaloes, pigs or fowls. The votaries eat the sacrifice, and thus, as they express it, "dedicate the life-breath to the gods, the flesh to ourselves." No special days are set apart for the ceremony, but it can not be performed on Sunday, as that day is sacred to Himáriyá. Those who wholly neglect the duty are supposed to suffer in person or property, and the common hill disease of gout is believed to be one of the special modes by which the gods manifest their displeasure. Temples and idols are alike unknown, nor, so far as I can ascertain, does the imagination of the Limbus trouble itself to clothe its vague spiritual conceptions with any bodily form.

Himáriyá, the god of the forest, is propitiated on Sundays by offerings of sheep, goats, fowls, pigeons and Indian-corn. A stone under a tree by the roadside is smeared with vermilion and bound with thread, and this place of sacrifice is marked by consecrated rags tied to a bam-boo pole.

In addition to these more or less beneficent, or at least neutral, divinities, the Limbus are compassed about by a multitude of nameless evil spirits, "who require peculiar management in warding off their caprices." To appease and propitiate these is the special function of the Bijuás, a class of wandering mendicants peculiar to Sikkim and the eastern parts of Nepal. Bijuás are wholly illiterate, and travel about the country muttering prayers and incantations, dancing, singing, prescribing for the sick and casting out devils. They wear a purple robe and broad-brimmed hat, and are regarded with great awe by the people, into whom they have instilled the convenient belief that their curses and blessings will surely be fulfilled, and that ill-luck will attend any one who allows a Bijuá to leave his door dissatisfied.

While the Bijuá acts as exorcist and devil-worshipper for all the Himalayan races, the equally illiterate Phedangma is the tribal priest of the Limbus for the higher grades of spirits, and officiates at sacrifices, marriages, and funerals. He is also called in at births to foretell the destiny of the infant, and to invoke the blessings of the gods. The office frequently descends from father to son, but any one may become a Phedangma who has a turn for propitiating the gods, and for this reason the occupation shows no signs of hardening into a caste.

Following this principle, the Limbu religion may be defined as a rather elementary form of Shamanistic animism, in which the Bijuá and Phedangma play the part of Shaman, the former operating on the demons, and the latter having for his department the gods. Finally, we may perhaps hazard the conjecture that the original religion of the Limbus is closely akin to the Pon or ancient religion of Tibet. In both we find the forces of nature and the spirits of departed men exalted into objects of worship. In both systems temples and images are unknown, while propitiatory offerings occupy a prominent place. To complete the parallel, neither recognize a definite priestly order, while both encourage resort to Shamans or medicine men to ward off the malign influences which surround the human race.

Both cremation and burial are in vogue among the Limbus, the latter being the more common, and probably the older, practice. The corpse is placed lying on its back with the head to the east. The grave is lined with stones, and a cairn, consisting of four tiers for a man and three for a woman, erected on the top. The Phedangma attends at the funeral and delivers a brief address to the departed spirit on the general lot of mankind and the doom of birth and death, concluding with the command to go whither his fathers have gone and not to come back to trouble the living with dreams. Neither food nor clothes are placed in the grave, but sometimes a brass plate with a rupee in it is laid under the head of the corpse. For nine days after the funeral the sons of the deceased live on plain rice without any salt, and for a month or two the relatives wear flowers in their hair and avoid merry-makings. The special and characteristic sign of mourning is a piece of white rag tied round the head. There is no periodical ceremony for the propitiation of ancestors.

The religion of the Mahulis is at present a mixture of half-forgotten Animism and Mahuli Hinduism imperfectly understood. They affect indeed to worship all the Hindu gods but they have not yet risen to the distinction of employing Bráhmans, and their working deities seem to be Bar-pahárá and Manasá. The former is merely another name for the well-known mountain god of the Mundís and Santáls, while the latter is the snake goddess, probably also of non-Aryan origin, whose cult has been described in the article on the Bágdís. To these are offered goats, fowls, rice, and ghee, the offerings being afterwards eaten by the worshippers themselves.

The Mahulis of Northern Manbhum bury their dead face downwards, but this practice is not universal, for the Pátar Mahulis and the Mahulis of the Santal Parganas burn their dead and bury the ashes near at hand. On the eleventh day after death offerings of milk, ghee, and rice are made at the place of burial. Similar offerings are pre-ented in the months of Kártik and Chait for the propitiation of departed ancestors in general. The anniversary of the death of an individual ancestor is not observed.

Málé

The religion of the Málés is Animism of the type common among Dravidian tribes. At the head of their system stands the Sun called Dharmer Gosain, and represented by a roughly-hewn post set up in front of each house. He is worshipped with offerings of fowls, goats, sindur, and oil at the commencement of the harvest season, and at other times when any misfortune befalls the family. When people are gathered together for this purpose, the village headman, who acts as priest, goes round the congregation with an egg in his hand, and recites the names of certain spirits. He then throws away the egg, apparently as a propitiatory offering, and enjoins the spirits to hold aloof and abstain from troubling the sacrifice. Among the minor gods mentioned by Lieutenant Shaw, Rakai now appears as the tutelary deity of strong drink, who is worshipped by the headman of the village before beginning to distil liquor from the fresh *mahua* crop. According to Lieutenant Shaw, Rakahi is sought out when a man-eating tiger infests a village or a bad epidemic breaks out, and is worshipped in the form of a black stone set up under a tree and hedged round with *Euphorbia* plants. Chal or Chalnad is a god presiding over a group of ten villages, and represented by a black stone set up under a *mukmum* tree. Goats and pigs are the animals usually offered to him, and the sacrifice of a cow, said by Lieutenant Shaw to be performed every three years, seems to have fallen into disuse. Pau-Gosain, the god of highways, lives under a *bel*, *kuiac*, or *mukmum* tree. He is invoked by persons going on a journey. When Lieutenant Shaw wrote, the offering was a cock. Now it is a white goat, and the sacrifice is said to be a very expensive one, by reason of the large amount of rice-beer—ten or twelve maunds—that must be offered to the god and drunk by his assembled votaries. The tutelary deity of the village, spoken of by Lieutenant Shaw under the name of Dwári Gosain, is now called Bára-Dwári, because he is supposed to live in a temple with twelve doors. The whole village worship him in the month of Mágh. Colonel Dalton suggests that this god may perhaps be the same as the Oráon Dára. Kul Gosain, 'the Geres of the mountaineers,' and Autga, the god of hunting, appear not to be known at the present day. Gumo Gosain, or the god of the pillar, is represented in every household by the wooden post (*gumo*) which supports the main rafters of the roof. On this the blood of a slain goat is sprinkled to propitiate the spirits of ancestors. The fact that this god is common to the Málés and Mál Pahárias (see page 413 below), and is worshipped by both in the same way, seems to tell strongly in favour of the common origin of the two tribes. As in Lieutenant Shaw's time, Chamda Gosain still ranks high among the tribe, and demands offerings on larger scale than any other god. A sacrifice consisting of twelve pigs and twelve goats, with rice, oil and *sindur* in proportion, must put a severe strain on the resources of a Málé villager. In order to commemorate the event, three bamboos decorated with streamers of bark painted black and red at the ends, the natural colour being left in the centre, are set up to represent Chamda Gosain in front of the house of the person who organizes the sacrifice. One bamboo has ninety streamers, another sixty, and the third twenty, and the poles are also decorated with peacock's feathers. The night is spent in dancing, and in the morning sacrifices are offered in the house and in the fields for a blessing on the family and on the crops. The bamboos are then taken inside and suspended from the roof of the house to show that the owner has performed the full sacrifice.

The question whether the Málés have any functionaries who can properly be called priests is in some respects an obscure one. According to Buchanan, they formerly had priests called Naiyas or Laiyas, a designation common enough in Western Bengal, but these, it is said, have now disappeared, and their functions have devolved upon the Demános, who were originally only diviners selected for their supposed intimacy with the spirits, their capacity for going into trances, and so forth, these powers being in some mysterious way bound up with their long hair, which may on no account be cut. More recent observers, however, assure me that the Demáno merely directs religious and ceremonial observances, but does not himself officiate as priest. The duties of priest are discharged by the village headman or the chief member of the household, or by any influential person chosen for the occasion, and the Demáno is merely a spiritual director endowed with certain supernatural powers, such as that of discerning the causes of all diseases, so that when a man falls ill he can say which of the gods has afflicted him and what sort of sacrifice should be offered to bring about his recovery. On the occasions when Chamda Gosain and Guma Gosain are worshipped, the Demáno is decorated with a necklace of cowrie shells. No Demáno may eat turmeric. Besides the Demáno there is another class of divines called Cherm, whose duty is to select persons to officiate as priests. This he does by balancing a bow on his two hands and watching its oscillations, while he calls out one by one the names of the persons present, the idea being that the god thus signifies from whose hands he wishes to receive the offering. The flesh of the animals offered in sacrifice is eaten by the male worshippers: women may not partake of it.

As a rule the Málé bury their dead, the corpse being laid on a layer of *bhelak* leaves with the head pointing towards the north. The bodies of those who died of snake-bite or have come to a violent end are exposed in the jungle. According to Colonel Dalton, the bodies of Demános are dealt with in this fashion on the ground that if they are buried in the village, their ghosts walk and cause annoyance to the living. On the fifth day after death a feast is given, to which all members of the family are invited. Six months or a year later a special ceremony is held for the purpose of appeasing the spirit of the dead man. The chief part is played by the Demáno, who represents the deceased, and is dressed so as to personate him as closely as possible. In this character he demands clothes, ornaments, food and whatever the dead man was fond of in this life, the belief being that if they are given to the Demáno, the spirit will in some unexplained fashion have the use of them in the world of the dead. When the Demáno has got all that he asked for, he goes into a fit and remains insensible for some minutes, during which time he is

supposed to be in communication with the spirit of the deceased. On his revival the company partake of a feast.

At the head of the Pahárá religion stands the sun, to whom reverential obeisance is made Mál Pahárá morning and evening. On occasional Sundays a special worship is performed by the head of the family, who must prepare himself for the rite by eating no salt on the previous Friday and fasting all Saturday, with the exception of a light meal of molasses and milk, taken at sunset after bathing. Before sunrise on Sunday morning a new earthen vessel, a new basket, some rice, oil, areca nuts, and vermillion, and a brass *lota* of water with a mango branch stuck in it, are laid out on a clean space of ground in front of the house. The worshipper shows these offerings to the rising sun and prays, addressing the luminary as 'Gosain,' that he and his family may be saved from any specific danger or trouble that is supposed to threaten them. The rice is then given to a goat, which is decapitated while eating by a single blow from behind. The body of the animal is then cooked and served up at a feast, of which the neighbours partake; the head alone, which is deemed *prasád*, or sacred, being carefully reserved for the members of the family. Next in honour to the sun are Dharti Mái, mother earth; her servant, or as some say sister, Garámi; and Singhbáhini, who bears rule over tigers, snakes, scorpions, and all manner of noxious beasts. To the earth goats, pigs, fowls, etc., are offered in Ashar and Mággh, and buffaloes or goats are sacrificed about the time of the Hindu Durga Pujá to the goddess Singhbáhini, who is represented for sacrificial purposes by a lump of clay daubed with vermillion and oil and set up in front of the worshipper's house. The village Mánjhi officiates as priest. The Mággh worship of Dharti Mái is clearly the festival described by Colonel Dalton under the name Bhuindob, the earth god.¹

"The Máls plant in their dancing place two branches of the *sál* tree, and for three days they dance round these branches, after which they are removed and thrown into a river, which reminds one of the Karma festival as solemnised by the Oraons and Kols in Chota Nagpur. On this occasion the men and women dance *vis-à-vis* to each other, the musician keeping between. The men dance holding each other above their elbows, the left hand of one holding the right elbow of the other, whose right hand again holds the left elbow of the arm that has seized him. The fore-arms touching are held stiffly out and swayed up and down. They move sideways, advance, and retire, sometimes bending low, sometimes erect. The women hold each other by the palms, interlacing the fingers, left palm upon right palm, and left and right fore-arms touching. They move like the men."

Two curious points may be added. The man at whose instance or for whose benefit the ceremony is performed must sleep the night before on a bed of straw, and the dancing party who are greatly excited with drink, shout continually *búr, búr* (*pudendum muliebrem*), a mode of invocation believed to be especially acceptable to the goddess. In this somewhat indelicate cry we may perhaps see a barbarous and undraped reference to the *vis genetrix natura* so prominent in many early forms of belief.

Besides these greater elemental deities, the Mál Pahárá recognize and propitiate a number of vaguely-defined animistic powers, chief among whom is Chordánu, a malevolent spirit needing to be appeased at certain intervals with sacrifices and the first-fruits of whatever crop is on the ground. To the same class belong Mahádáná, for whom eggs are the appropriate offering. Among the standard Hindu deities Kali and Lakshmi are honoured with sparing and infrequent worship, the offerings in this case being the perquisite of the village headmen.

Ancestor worship is in full force, and the *sacra privata* of a Mál Pahárá household correspond precisely with those observed by the Málé tribe. The Lares are known to both by the familiar term Gumo Gosain or Deota, the gods of the wooden pillar (*Gumo*),² which supports the main rafters of the house. Around this centre are grouped a number of balls of hardened clay, representing the ancestors of the family, to whom the first-fruits of the earth are offered, and the blood of goats or fowls poured forth at the foot of the pillar that the souls may not hunger in the world of the dead. As every household is guarded by its ancestral gods, so every village has a tutelary deity of its own—*Larem agri custodem*, who lives in a *sál* tree within the village. This tree is daubed with red lead and worshipped on certain occasions, and may on no account be cut down. The tribe has no priests, and the head of the household or village, as the case may be, performs all religious and ceremonial observances. Bráhmans, however, are to some extent held in honour, and presents are given to them on festal occasions.

The dead are usually burned, and a piece of bone is saved from the flames to be thrown into a river or a deep tank the waters of which do not run dry. The relatives are deemed impure, and may not eat salt for five days. At the end of that time they are shaved, and partake of a feast provided by the eldest son. The funeral expenses are a first charge on the estate, and after these have been paid the balance is equally divided among the sons, daughters getting no share. Very poor persons, who cannot afford to give a feast, bury their dead in a recumbent position with the head towards the south, and give nothing but a little salt and meal (*sattu*) to the friends who attend the funeral. In Buchanan's time it was the universal custom to bury the dead on the day of death. No *śráddh* is performed by the Mál Pahárá proper, but some of the wealthier members of the Kumár Bhág sub-tribe are beginning to adopt a meagre form of this ceremony in imitation of their Hindu neighbours.

The religion of the Mangars may best be described as lax Hinduism tempered by survivals Mangar. of an earlier Animistic cult. Satya Narain is one of their favourite deities. Sansári and Aitá-bárá are also worshipped with offerings of goats, fowls, and pigeons. Upadhya Bráhmans

¹ Ethnology of Bengal, p. 274.

² The word is Multo.

assist at the cult of Satya Narain and of the recognized Hindu gods; but Sansári and Aitábáreh are worshipped by the heads of households without the assistance of priests. Brahmans are not held to be degraded by serving as priests in Mangar families.

The funeral ceremonies of the Mangars, which are the same as those of the Gurung and Sunnwars, are curious and interesting. Immediately after death the corpse is tied with three pieces of rope to a stout pole and carried to the grave. There it is stripped, dressed in new clothes, and laid on its back in the grave with the head pointing to the north. The forehead is smeared with sandal wood paste. One of the maternal relatives of the deceased, usually the maternal uncle, is then chosen to act as priest for the occasion, and to conduct the ritual appointed for the propitiation of the dead. First of all he puts in the mouth of the corpse some silver coins and some coral, which is greatly prized by the Himalayan races. Then he lights a wick soaked in clarified butter, touches the lips with fire, scatters some parched rice about the mouth, and lastly covers the face with a cloth called *puyunri*. Two bits of wood, about three feet long, are set up on either side of the grave. In the one are cut nine steps or notches forming a ladder for the spirit of the dead to ascend to heaven; on the other every one present at the funeral cuts a notch to show that he has been there. As the maternal uncle steps out of the grave, he bids a solemn farewell to the dead and calls upon him to ascend to heaven by the ladder that stands ready for him. When the earth has been filled in, the stick notched by the funeral party is taken away to a distance and broken in two pieces, lest by its means the dead man should do the survivors a mischief. The pole used to carry the corpse is also broken up, and the spades and ropes are left in the grave.

When the mourners return home, one of their party goes ahead and makes a barricade of thorn bushes across the road midway between the grave and the house of the deceased. On the top of the thorns he puts a big stone on which he takes his stand, holding a pot of burning incense in his left hand and some woollen thread in his right. One by one the mourners step on the stone and pass through the smoke of the incense to the other side of the thorny barrier. As they pass, each takes a piece of thread from the man who holds the incense and ties it round his neck. The object of this curious ceremony is to prevent the spirit of the dead from coming home with the mourners and establishing itself in its old haunts. Conceived of as a miniature man, it is believed to be unable to make its way on foot through the thorns while the smell of the incense, to which all spirits are highly sensitive, prevents it from surmounting this obstacle on the shoulders of one of the mourners.

Mech.

The religion of the Mech, like that of the Dhumál, is still in an early stage of transition from Animism to Hinduism. They describe themselves as Hindus of the Saiva sect, and worship Siva under the name of Batho, and his consort Káli as Bali Khungri. To the former the Agni-Mech sacrifice buffaloes, goats, and pigeons; while his wife has to put up with the less respectable offerings of pigs, fowls, and goats, which the Jāti-Mech offer indifferently to either. The Jāti-Mech also reverence as a household goddess (*ghar-devi*), a nameless personage, supposed to be the mother of Siva, who is represented by a lump of sun-dried clay set in the corner of the chief room. Pigs, fowls, plantains, and parched rice are offered to her on any day in the week except Sunday, Tuesday, or Wednesday. Among their other deities may be mentioned Tsimising, Tista Burhi (Buchanan's 'old lady of the Tista'), Mahesh Thákur, Sonnsi and Mahákál. They have no Brahmans, and priests (*dādm* or *ojhá*) chosen from among the tribe to serve them for religious and ceremonial purposes.

Those who can afford a funeral pyre prefer to burn the dead, while the poorer members of the tribe bury, placing the corpse face upwards with the head pointing towards the south. In the latter case a small fire is kindled upon the grave, in which food and drink are burned for the benefit of the deceased. The Agni-Mech perform a meagre propitiatory rite on the eighth day, and the Jāti-Mech on the fourth day, after death. With both the important part of the proceedings is the feast which is given to the friends and relatives of the deceased. Some repeat the ceremony every year after the manner of the Hindus, but this is unusual.

Munda.

At the head of the Munda religion stands Sing-Bonga, the sun, a beneficent but somewhat inactive deity, who concerns himself but little with human affairs, and leaves the details of the executive government of the world to the gods in charge of particular branches or departments of nature. Nevertheless, although Sing-Bonga himself does not send sickness or calamity to men, he may be invoked to avert such disasters, and in this view sacrifices of white goats or white cocks are offered to him by way of appeal from the unjust punishments believed to have been inflicted by his subordinates. Next in rank to Sing-Bonga comes Buru-Bonga or Marang-Buru, also known as Pat Sarná, a mountain god, whose visible habitation is usually supposed to be the highest or most remarkable hill or rock in the neighbourhood. "In Chota Nágpur," says Colonel Dalton,¹ "a remarkable bluff, near the village of Lodhma, is the Marang-Buru or Maha Buru for a wide expanse of country. Here people of all castes assemble and sacrifice—Hindus, even Mahomedans, as well as Kols. There is no visible object of worship; the sacrifices are offered on the top of the hill, a bare semi-globular mass of rock. If animals are killed, the heads are left there, and afterwards appropriated by the páhan or village priest." Marang-Buru is regarded as the god who provides over the rainfall, and is appealed to in times of drought, as well as when any epidemic sickness is abroad. The appropriate offering to him is a buffalo. Ikir Bonga rules over tanks, wells, and large sheets of water; Garhá-éra is the goddess of rivers, streams and the small springs which occur on many hill sides in Chota Nágpur; while Náge or Nágn-éra is a general name applied to the minor deities or spirits who haunt the swampy lower levels of the terraced rice-fields.

are believed to have a hand in spreading disease among men, and require constant propitiation to keep them out of mischief. White goats and black or brown cocks are offered to *Ikir Bonga*, and eggs and turmeric to the *Náge*. *Deswáli* or *Kára-Sarná* is the god of the village who lives with his wife *Jábir Burhi* or *Sarhul-Sarná* in the *Sarná* or sacred grove, a patch of the forest primeval left intact, to afford a refuge for the forest gods. Every village has its own *Deswáli*, who is held responsible for the crops, and receives periodical worship at the agricultural festivals. His appropriate offering is a *kúra* or he-buffalo; to his wife fowls are sacrificed. *Gumi* is another of the *Sarná* deities whose precise functions I have been unable to ascertain. Bullocks and pigs are sacrificed to him at irregular intervals. *Chandor* appears to be same as *Charlo Omol* or *Chanala*, the moon worshipped by women, as the wife of *Sing-Bonga* and the mother of the stars. Colonel Dalton mentions the legend that she was faithless to her husband, and he cut her in two, 'but repenting of his anger he allows her at times to shine forth in full beauty.' Goats are offered to her in the *Sarná*. *Háprom* is properly the homestead, but it is used in a wider sense to denote the group of dead ancestors who are worshipped in the homestead by setting apart for them a small portion of every meal and with periodical offerings of fowls. They are supposed to be ever on the watch for chances of doing good or evil to their descendants, and the *Mundas* fully realise the necessity for appeasing and keeping them in good humour.

The festivals of the tribe are the following:—(1) *Sarhul* or *Sarjum-Bábá*, the spring festival corresponding to the *Baha* or *Bah-Bonga* of the *Santáls* and *Hos* in *Chait* (March-April), when the *sál* tree is in bloom. Each household sacrifices a cock and makes offerings of *sál* flowers to the founders of the village in whose honour the festival is held. (2) *Kadletá* or *Bataali* in *Asarh* at the commencement of the rainy season. "Each cultivator," says Colonel Dalton, "sacrifices a fowl, and after some mysterious rites a wing is stripped off and inserted in the cleft of a bamboo and struck up in the rice-field and dung-heap. If this is omitted, it is supposed that the rice will not come to maturity." (3) *Naná* or *Jom-Naná*, the festival of new rice in *Asin* when the highland rice is harvested. A white cock is sacrificed to *Sing-Bonga*, and the first-fruits of the harvest are laid before him. Until this has been done it would be an act of impiety to eat the new rice. (4) *Khariá puja* or *Kolom Singh*, called by the *Hos* *Deswáli Bonga* or *Mágh Parab* celebrating the harvesting of the winter rice, the main crop of the year. Five fowls and various vegetables are offered to *Deswáli*, the god of the village at the *Khalihan* or threshing floor. Among the *Hos* of *Singbhum* the festival is kept as a sort of *saturnale*, during which the people give themselves up to drunkenness and all kinds of debauchery. This is less conspicuously the case with the *Mundas* of the plateau who live scattered among Hindu and Christian neighbours, and do not form a compact tribal community like the *Hos* of the *Kolhán*. The festival, moreover, is kept by the *Mundas* on one day only, and is not spread over a month or six weeks, during which time the people of different villages vie with each other in dissipation, as they do in the *Kolhán*.

The religion of the caste is not easy to define. We may discern in it a substratum of *Murmi* primitive Animism overlaid by elements borrowed from Hinduism, and, less freely, from Buddhism. Everything tends towards gradual adoption of the Nepalese form of Hinduism, and Buddhist usages are believed to be on the decline, though the Lama still serves as priest at a *Murmi* wedding, and flags stamped with the sacred *om* may be seen flying in *Murmi* villages. Notwithstanding this general tendency towards the triumph of Hinduism, some of the popular deities of the caste seem to belong to an earlier type. The stone fetish called *Thangbaljho* is honoured by winding cloth round it and sprinkling rice on its top; and every September goats and fowls are sacrificed and their blood poured forth on the stone. Similar offerings are made to *Purbujá devatá*, a forest god who lives in a tree and visits with fever and rheumatism those who neglect his worship. *Bhim Singh*, one of the *Pándava* brothers, is worshipped at the *Durga Puja* with sacrifices of buffaloes, goats, fowls, and ducks. *Sheikijho* is a fetish of ill-defined attributes; while *Gyong* and *Changreshi* appear to be deified Lamas. Behind these again are the village and household gods, a shifting and shadowy multitude, which no man can number or describe, clamouring, like the ghosts who crowded round *Odysseus*, for their share of sacrifice and libation.

Brahmans have not yet been called in to organize this chaotic Pantheon. Their functions are confined to presiding over the ceremony of *mithá*, and occasionally assisting at the worship of some of the standard Hindu gods. The daily religion of the caste is looked after by Lamas or by any *Murmi* who has a turn for ceremonial ministration.

The religion of the *Musahars* illustrates with remarkable clearness the gradual transformation of the fetishistic Animism characteristic of the more primitive Dravidian tribes into the debased Hinduism practised in the lower ranks of the caste system. Among the standard gods of the Hindu Pantheon, *Káli* alone is admitted to the honour of regular worship. To her the men of the caste sacrifice a castrated goat, and the women offer five wheaten cakes with prayers that her favour may be shown to them in the pains of childbirth. In parts of *Gya* and *Hasaribagh* an earlier stage of her worship may be observed. Her shrine stands at the outskirts of the village, and she is regarded as a sort of local goddess, to be appeased on occasion, like the *Thakuráni Mai* of the *Hill Bhuiyas*, by the sacrifice of a hog. It is curious to observe that the definite acceptance of *Káli* as a member of the Hindu system seems rather to have detracted from the respect in which she was held before she assumed this comparatively orthodox position. Her transformation into a Hindu goddess seems to have rendered her less malignant. Her worship, though ostensibly put forward as the leading feature of the *Musahar* religion, seems to be looked upon more as a tribute to social respectability than as a matter vitally affecting a man's personal welfare. *Káli* or *Debi Mai*, as she is commonly called, may be appeased by an occasional sacrifice, but the *Birs* required to be kept constantly in good humour, or they may

do serious mischief. The six Birs or heroes known as Tulsi Bir, Rikmun, Ram Bir, Bhawár Bir, Asan Bir, and Charakh Bir are believed to be the spirits of the departed Musahars who exercise a highly malignant activity from the world of the dead. Rikmun is often spoken of as the *purka* or ancestor of the caste, and when a separate sacrifice is offered to him the worshipper recites the names of his own immediate forefathers. On ordinary occasions the Birs are satisfied with offerings of sweetmeats prepared in ghee, but once in every two or three years they demand a collective sacrifice of a more costly and elaborate character. A pig is provided, and country liquor, with a mixture of rice, molasses, and milk is offered at each of a number of balls of clay which are supposed to represent the Birs.¹ Then a number of Bhakats or devotees are chosen, one for each Bir, with the advice and assistance of a Bráhmán, who curiously enough is supposed to know the mind of each Bir as to the fitness of his minister. The shaft of a plough and a stout stake being fixed in the ground, crossed swords are attached to them, and the Bhakats having worked themselves up into a sort of hypnotic condition, go through a variety of acrobatic exercises on the upturned sword-blades. If they pass through this uninjured, it is understood that the Birs accept the sacrifice. The pig is then speared to death with a sharp bamboo stake, and its blood collected in a pot and mixed with country liquor. Some of this compound is poured forth on the ground and on the balls of clay, while the rest is drunk by the Bhakats. The ceremony concludes with a feast in which the worshippers partake of the offerings.

The Musahars have not yet attained to the dignity of keeping Bráhmáns of their own, though they call in Bráhmáns as experts to fix auspicious days for marriages and important religious ceremonies, to assist in naming children, and even to interpret the will of characteristic Musahar deities like the Birs. In the matter of funeral ceremonies the tendency is to imitate Hindu usage. A meagre version of the standard *śráddh* is performed about ten days after death, and once a year, usually in the month of October, regular oblations are made for the benefit of deceased ancestors. It deserves notice that with Musahars, as with Doms, the sister's son of the deceased officiates as priest at the *śráddh*.

Nágasur

In Sargujá the Nágesar worship the sun with offerings of white cocks and sacrifice goats to Bhikárá deota, but their chief god is said to be the tiger. In Jashpur they swear by the tiger, but do not worship him, and their chief god is Mohidhúnia, to whom fowls are offered every year and a buffalo once in three years. They also recognize Darha, the village god of the Mundas, and keep the Sarhed festival like them.

Oráon

Like the Mundas, they acknowledge a Supreme God, adored as Dharmí or Dharmesh, the Holy One, who is manifest in the sun, and they regard Dharmesh as a perfectly pure, beneficent being, who created us, and would in his goodness and mercy preserve us, but that his benevolent designs are thwarted by malignant spirits whom mortals must propitiate as Dharmesh cannot or does not interfere if the spirit of evil once fastens upon us. It is therefore of no use to pray to Dharmesh or to offer sacrifices to him, so though acknowledged, recognized, and revered, he is neglected, whilst the malignant spirits are adored. The Oráons on the western portion of the plateau, where there are few Mundas, ignore the Bongas and pay their devotion to Darhá, the Sarna Burhi (Lady of the Grove), and the village *bhúts*, who have various names. Chanda or Chandí is the god or goddess of the chase, and is always invoked preparatory to starting on great hunting expeditions. Any bit of rock, or stone, or excrescence on a rock, serves to represent this deity. The hill near Lodhma, known to the Mundas as Marang Búrú, is held in great reverence by the Oráons. To the spirit of the hill, whom they call Baranda, they give bullocks and buffaloes, especially propitiating him as the *bhút*, who, when malignantly inclined, frustrates God's designs of sending rain in due season to fertilise the earth. In some parts of the country Darhá is almost the only spirit they propitiate. If fowls are offered to him, they must be of divers colours, but once in three years he should have a sheep from his votaries; and once in the same period a buffalo, of which the *ghá* or *páhn* gets a quarter. The Oráon must always have something material to worship, renewed every three years. Besides this superstitious dread of the spirits above named, the Oráon's imagination tremblingly wanders in a world of ghosts. Every rock, road, river, and grove is haunted.

Pán.

The professed religion of the Páns is a sort of bastard Hinduism, varying with the locality in which they happen to be settled. In Orissa and Singbhum they incline to Vaishnavism, and tell a silly story about their descent from Duti, the handmaiden of Rádhá, while in Lohardagá the worship of Mahádeva and Devi Máí is more popular. This veneer of Hinduism, however, has only recently been laid on, and we may discern underneath it plentiful traces of the primitive Animism common to all the Dravidian tribes. Man is surrounded by unseen powers—to call them spirits is to define too closely—which need constant service and propitiation, and visit a negligent votary with various kinds of diseases. The Páns seem now to be shuffling off this uncomfortable creed and deserting their ancient gods, while as yet they have not taken vigorously to Hinduism, and they are described by one observer as having very little religion of any kind. Among the minor gods in vogue among them mention may be made of Pauri Pahári or Bar-Pahár, a divinity of unquestionably Dravidian origin, who inhabits the highest hill in the neighbourhood and demands the sacrifice of a he-goat in the month of Phálgun, and occasional offerings of ghee all the year round. The snake is also worshipped as the ancestor of the caste. An attempt was made recently by the Páns of Moharbhany to induce Bráhmáns to officiate for them as priests at marriages and funeral ceremonies, but no Bráhmáns could be persuaded to undertake these offices.

¹ Some speak of the balls as the "houses" of the Birs, but this seems to be a modern refinement on the primitive idea, which recognises no distinction between the god himself and the fetish which represents him.

The religion of the Rautiás may best be described as a mixture of the primitive Animism characteristic of the Chhot-Nagpur and the debased form of Hinduism which has been disseminated in Chhot-Nagpur by a class of Brāhmins markedly inferior in point of learning and personal purity to those who stand forth as the representatives of the caste in the great centres of Hindu civilization. Among the Bar-gohri Rautiás many have of late years become Vaishnavas; the rest, with most of the Chhot-gohri and the Berrás of both sub-castes, are devotees of Rama and Gauri are the favourite deities, whose worship is conducted by Sakadwipi Brāhmins more or less in the orthodox fashion. Behind the fairly definite personalities of these greater gods there loom in the background, through a fog of ignorance and superstition, the shapes of Bar-pahár (the Marang Buru or mountain of the Mundas); Bura-buri, the supposed ancestors of mankind; the seven sisters who scatter cholera, small-pox, and cattle-plague abroad; Goraiá, the village god—a sort of rural Terminus; and the myriad demons with which the imagination of the Kolhs peoples the trees, rocks, streams, and fields of its surroundings.

To Bar-pahár are offered he-buffaloes, rams, he-goats, fowls, milk, flowers, and sweetmeats; the animals in each case being given some rice to chew and decked with garlands of flowers before being sacrificed. When offered in pursuance of a special vow, the animal is called *chardol* and is slain in the early morning in the *sarnd* or sacred grove outside the village; rice, ghee, flowers, vermillion, and *bet* leaves being presented at the same time. No female is present at the ceremony. The carcase of the victim is distributed among the worshippers, but no part of it may be taken into the village, and it is cooked and eaten on the spot, the remnants being buried in the *sarnd* at the end of the feast. The head is eaten by the man who made the vow and the members of his family, but no others share in it, owing to the belief that whoever partakes of the head would thereby render himself liable to perform a similar *gud*. When a buffalo is sacrificed, the Rautiás do not eat the flesh themselves, but leave the carcase to the Mundas, Kharias, and other beef-eating folk who may happen to be present.

To the seven sisters (*devis*) and their brother Bhairó a rude shrine (*devigarhi*) is erected in the centre of every village, consisting of a raised plinth five cubits square covered by a tiled or thatched roof resting on six posts of *gularchi* trees (*Plumeria*). In the middle of the plinth, on a line running north and south, stand seven little mounds of dried mud, representing the seven goddesses, while a smaller mound on one side stands for Bhairó. In front of the *devigarhi*, at some ten or fifteen cubits' distance, is a larger mound representing Goraiá, the village god, to whom pigs are sacrificed by the village priest (*páhan*) and by men of the Dosádh caste. Regarding the names and functions of the seven sisters there seems to be much uncertainty. Some Rautiás enumerate the following:—

Burhiá Máí or Sitalá.
Kankárin Máí
Káli Máí.
Kuleswari Máí.
Bágheswari Máí
Mareswari Máí
Dulhári Máí

Others substitute Jwálá-mukhi, Vindhyabásini, Málat Máí, and Joginiá Máí for the last four. Jwálá-mukhi is a place of pilgrimage in the Lower Himalayas north of the Punjab. It is believed that inflammable gas issues from the ground and is believed to be the fire created by Parbatí when she desired to become a *sati*. Vindhyabásini is a common title of Sitalá Devi, who prevails over small-pox throughout Northern India. I cannot find out which sisters are supposed to be responsible for cholera and cattle-plague. Kuleshwari (*kul*-‘tiger’ in Mundári) and Bágheswari apparently have to do with the tiger. He-goats, flowers, fruit, and *bet* leaves are offered to the seven sisters in front of the *devi-gurhi*. Women and children are present at the worship. A Sakadwipi Brāhman presides, but does not slay the victims.

The Rautiás, though less plagued by the terrors of the unseen world than are the Mundas and Oráons, have certain superstitions which are worth recording. Women who die in childbirth, persons killed by a tiger, and all *ojhas* or exorcists, are liable after death to reappear as *ojhas*, or malevolent ghosts, and give trouble to the living. In such cases an exorcist (*ojhá* or *ojha*) is called in to identify the spirit at work, and to appease it by gifts of money, goats, fowls, and the like. Usually the spirit is got rid of in a few months, but some are specially persistent and require annual worship to induce them to remain quiet. Spirits of this type, who were great warriors or otherwise men of note during their life-time, often extend their influence over several families, and eventually attain the rank of a tribal god.

Babu Rakhal Das Halder, Manager of the Chutia Nagpur estate, gives the following account of exorcism from his personal experience. In December 1884, when the Manager was at the foot of the Báragáin hills in Lohardagá, a Kurmi woman of Kukuf was killed by a tiger, and the tiger-démon in her form was supposed to be haunting the village. An *ojhá* was sent for to lay the ghost, took a young man to represent the tiger-démon, and after incantations put him into a kind of mesmeric condition, in which he romped about on all fours and generally demeaned himself like a tiger. A rope was then tied round his loins and he was dragged to a cross-road, where the violent fit passed off and he became insensible. In this condition he remained until the *ojhá* recited certain *mantras* and threw rice on him, when he regained his senses, and the démon was pronounced to have quitted the village.

According to Mr. Skretarud traces may be discerned in the background of the Santál religion of a Jainist Supreme Deity called Thakur, whom the Santáls have long ceased to

worship for the sufficient reason that he is too good to trouble himself about anybody and does neither good nor ill to mankind. Some identify him with the Sun, whom the Santáls regard as a good god and worship every fifth or tenth year with sacrifices of slain goats. But this point is uncertain, and I am myself inclined to doubt whether a god bearing the Hindu name Thakur, and exercising supreme powers which mark a comparatively late stage of theological development, can really have formed part of the original system of the Santáls. However, this may be, the popular gods of the tribe at the present day are the following:—(1) Marang Buru, the great mountain or the very high one, who now stands at the head of the Santál Pantheon, and is credited with very far-reaching powers, in virtue of which he associates both with the gods and with the demons. (2) Moreko, fire, now a single god, but formerly known to the Santáls under the form of five brothers. (3) Jáir Erá, a sister of Moreko, the goddess of the sacred grove set apart in every village for the august presence of the gods. (4) Gosám Erá, a younger sister of Moreko. (5) Parganá, chief of the bongas or gods, and more especially master of all the witches, by reason of which latter functions he is held in especial reverence. (6) Mánjhi, a sort of second in command to Parganá, a personage who is supposed to be particularly active in restraining the gods from doing harm to men. The two latter are clearly deities constructed on the model of the communal and village officials whose names they bear. The idea is that the gods, like men, need supervising officials of this sort to look after them and keep them in order. All the foregoing gods have their allotted place in the sacred grove (*Jákirthán*) and are worshipped only in public. Marang Buru alone is also worshipped privately in the family.

Each family also has two special gods of its own—the Orak-bonga or household god, and the Abge-bonga or secret god. The names of the Orak-bongas are (1) Baspahar, (2) Deswáli, (3) Sás, (4) Goraya, (5) Barpahar, (6) Sarchawdi, (7) Thuntatursa. The Abge-bongas are the following:—(1) Dharasore or Dharasanda, (2) Ketkomkudra, (3) Champa-denagarh, (4) Garhsinka, (5) Lulachandi, (6) Dhanghara, (7) Kudrachandi, (8) Bahara, (9) Dursari, (10) Kudraj, (11) Gosám Erá, (12) Achali, (13) Deswáli. No Santál would divulge the name of his Orak-bonga and Abge-bonga to any one but his eldest son; and men are particularly careful to keep this sacred knowledge from their wives for fear lest they should acquire undue influence with the bongas, become witches, and eat up the family with impunity when the protection of its gods has been withdrawn. The names given above were disclosed to Mr. Skrefsrud by Christian Santáls. When sacrifices are offered to the Orak-bongas the whole family partake of the offerings; but only men may touch the food that has been laid before the Abge-bongas. These sacrifices take place once a year. No regular time is fixed, and each man performs them when it suits his convenience.

There still lingers among the Santáls a tradition of a 'mountain-god' (Buru-bonga) of unknown name, to whom human sacrifices used to be offered, and actual instances have been mentioned to me of people being kidnapped and sacrificed within quite recent times by influential headmen of communes or villages, who hoped in this way to gain great riches or to win some specially coveted private revenge. These are not the motives which prompted human sacrifice among the Kandhs of Orissa, a tribe whose internal structure curiously resembles that of the Santáls. The Kandh sacrifice was undertaken for the benefit of the entire tribe, not in the interest of individual ambition or malevolence. It is curious to hear that one of the men credited with this iniquity was himself murdered during the Santál rebellion of 1855, by being slowly hewn in pieces with axes, just as his own victims had been—a mode of execution which certainly recalls the well-known procedure of the Kandhs.

The chief festival of the Santáls is the Sohrai or harvest festival, celebrated in Paush (November-December), after the chief rice crop of the year has been got in. Public sacrifices of fowls are offered by the priest in the sacred grove; pigs, goats and fowls are sacrificed by private families, and a general saturnalia of drunkenness and sexual license prevails. Chastity is in abeyance for the time, and all unmarried persons may indulge in promiscuous intercourse. This license, however, does not extend to adultery, nor does it sanction intercourse between persons of the same sept, though even this offence, if committed during the Sohrai, is punished less severely than at other times. Next in importance is the *Baka puja*, kept in Phalgun (February-March) when the *sál* tree comes into flower. Tribal and family sacrifices are held, many victims are slain and eaten by the worshippers, every one entertains their friends, dancing goes on day and night, and the best songs and flute-music are performed. A peculiar feature of this festival is a sort of water-battle in which men and women throw water at each other until they are completely drenched.

Tháru.

The religion of the Thárus is a compound of the mingled Animism and Nature-worship characteristic of the aboriginal races and of elements borrowed from popular Hinduism. A prominent place in their Pantheon is taken by the hero Rikheswar, whom I suspect to be identical with the Rikhmun of the Musahar-Bhuiyas. According to the legend in vogue among the Thárus of Khari, this deified founder was a son of the renowned aboriginal King Raja, whose fame is still rife in many of the oldest cities of Upper India and Bihar as one who held the rank and title of *Chakravarti*, or universal emperor, in the olden time. Rikheswar or Raksha was banished, it is said, from his father's court, and ordered with his band of male followers to seek for a new home in the north, from which they were never to return. Setting out on their wanderings, they took as wives any women whom they could steal or capture on the road, and in this way the Tháru tribe was founded. It was not till they had reached the sub-Himalayan region in which they still dwell that they decided to rest and settle. The soul of Raksha is still believed to hover among the people of his tribe. Just as in ancient days he led them safely through the wide wilderness into a new and happy settlement, so in the present day he is said to be the

guardian and guide of men travelling on a distant journey. No Tháru ever sets out from his village for such a purpose without first propitiating him with gifts and promising him a sumptuous feast of flesh, milk, and wine on his return. His presence is represented by a mound of mud, with a stone fixed in the middle; and he delights in seeing the head of a live capon dashed against this stone, and to feel its blood trickling down the side. One peculiarity of this god is that he is deaf,—an emblem of his antiquity, and hence vows and prayers are addressed to him in a stentorian tone of voice. The title *guru*, which is generally prefixed to his name, implies that during his residence on earth he was famous as a wizard or medicine-man, and acquired through this means the kingship or leadership of his tribe.

The Animistic element in the Tháru faith being represented by Rikheswar, we may perhaps trace a mangled survival of Nature-worship in two other deities of some importance, to whom Thárus address their vows. One is Madadeo, the god of intoxicating liquor, especially of the rice-wine made by themselves; the other is Dharchandi, the patroness of cattle, though her name would imply that she was at first intended to impersonate the earth. Her shrine, like those of the other deities already named, is a mound of clay. The mound dedicated to Dharchandi is studded with short wooden crosses, on which rice, pulse, and other produce of the fields are offered, and always on plates of leaf. Her shrine is so placed that all the cattle of the village, together with the swine, sheep, and goats, pass it on going out to graze, and repass it on their return. When the cattle sicken or die, larger and more valuable offerings are made. Neither of these deities is known or worshipped by other natives of Upper India.

Bowls are offered to Dharchandi, he-goats to Mari, the patron goddess of Kanjars and, according to Mr. Nesfield, identical with Káli. This, however, seems not to be the case in Bihar. In Champáran Kuá is worshipped as a village deity by casting sweetmeats down a well (*kuá*) and smearing vermilion on its rim. All these primitive deities, however, are rapidly losing ground in the estimation of the people, and giving way to the more popular worship of Siva and his consort Káli. It is likely enough that both of these are themselves merely elaborated forms of aboriginal objects of worship, which may well have been familiar to an earlier generation of Thárus. But Siva and Kali, as now revered by the tribe, have clearly been borrowed at quite a recent date from the Hindus, and cannot be regarded as indigenous deities.

The goddess who presides over life and death, and whom the Thárus believe to be the supreme power in the universe, is Kálíká,—one of the numerous forms of Devi, Durga, or Káli, at whose name all India trembles, especially the low castes and the casteless tribes, amongst whom she originally sprung. Medicine-men look to Kálíká as the special patroness of their art. To the fair sex she is the goddess of parturition, and her aid is especially invoked by women who have had no children. All classes combine to give her a periodical ovation, accompanied with much dancing, banqueting, and drinking of wine, at about the middle of October. Thárus also take part in the huge animal sacrifice performed at her celebrated altar in Deví Patan (Gonda district). Such is her thirst for blood, that at this time 20 buffaloes, 250 goats, and 250 pigs are slaughtered daily for ten days continuously. The sacrifice is vicarious, the blood of buffaloes, etc., being intended as a substitute for that of human victims. This loathsome festival is thronged with visitors from the plains of India and from the hills of Nepal, Sikkim, and Bhotan.

Another deity revered by Thárus, and like Kálíká, of indigenous or non-Aryan origin, is her consort Siva known chiefly amongst Thárus by the name of Bhairava, the Terrible, or Thakur, the Lord, and amongst Hindus by that of Mahadev, the great god. He, like his spouse, is a god of destruction, and thirsts for blood, but he is chiefly worshipped by Thárus as the author of reproduction, of which a stone lingam, as amongst Hindus, is sometimes made the symbol. It is more usual, however, for a Tháru to erect a mud mound in front of his house and fix an upright pole in its centre to represent the presence of this phallic divinity."

Although modern Hinduism is fast displacing the earlier gods of the Tháru religion, it seems probable that the principles of their primitive belief will long survive in the strong fear of evil spirits which continually haunts the tribe. It is to the action of these spirits that fever, ague, cough, dysentery, fainting, headache, madness, bad dreams, and pain of all kinds are ascribed. In fact, the Thárus have no conception of natural disease, and no belief in natural death, except what is faintly conceived to be the result of natural decay. Their state, therefore, would be one of utter helplessness were it not for the reputed skill of medicine-men or sorcerers, who profess to have the power to control the spirits of the air or to interpret their grievances and wants. In the Tháru language these men are called *bararar*; but the titles of Guru, Gurú, Bhagat, Nyetya, Ojhait, all of which are borrowed from Hindi, are now in common use, though even of these the last two are probably of aboriginal or non-Sanskrit origin. The power of the medicine-man is tremendous. He has a host of liege spirits at his command. Not only can he expel a fiend from the body of the sufferer, but he can produce suffering or death by driving a malignant spirit into the body of his foe. In order to exorcise an evil spirit, he holds in his left hand some ashes of cowdung, or grains of mustard seed, or wild nuts, and after breathing some mystical virtue into them by the utterance of a spell, he causes the patient to eat them, or has them attached to his arm.

The religion of the Tipperahs is a debased form of Hinduism. They offer to Káli black goats, rice, plantains, sweetmeats, areca nut, curds, red lead, etc. The goddess has no image, but is represented for sacrificial purposes by a round lump of clay, the edges of which are drawn out into four points or legs, so that the whole, seen from above, bears a rough resemblance to a sea-urchin with four arms. Satya-Naráya is also worshipped, but in his case the offerings consist only of fruits or flowers. The tribe do not employ Bráhmans, but have priests, or rather exorcists, of their own, called *Kuchai*, whose office is hereditary.

Tipperah.

"When a Tipperah dies, his body is immediately removed from within the house to the open air. A fowl is killed and placed with some rice at the dead man's feet. The body is burnt at the water side. At the spot where the body was first laid out, the deceased's relatives kill a cock every morning for seven days, and leave it there with some rice as an offering to the manes of the dead. A month after death a like offering is made at the place of cremation, and this is occasionally repeated for a year. The ashes are deposited on a hill in a small hut built for the purpose in which are also placed the dead man's weapons,—a spear, *ddos* of two sorts (one his fighting *ddo*, the other his every-day bread-winner), arrow heads, his metal-stemmed pipe, earrings, and ornaments. The place is held sacred."

In connection with the beliefs of the Tipperahs regarding the spirits of the dead, Major Lewin speaks of a curious practice. He says:—"We were travelling once through the jungles, and the path led across a small streamlet. Here I observed a white thread stretched from one side to the other, bridging the stream. On inquiring the reason of this it appeared that a man had died away from his home in a distant village, his friends had gone thither and performed his obsequies, after which it was supposed that the dead man's spirit would accompany them back to his former abode. Without assistance, however, spirits are unable to cross running water, therefore the stream here had been bridged in the manner aforesaid."

Another use of the white thread mentioned by Lewin as practised by the Tipperahs and most of the hill races seems to be a survival of the primitive Animistic belief which attributes all disease to the action of malevolent spirits, who nevertheless can be propitiated by the exorcist who knows the proper means of turning away their wrath. When an epidemic breaks out in a village, the Tipperahs and many other hill tribes call in an *Auchai* to appease the demon of sickness by a sacrifice. The entire village is encircled with a newly-spun white thread, and the blood of the animal sacrificed is freely sprinkled about. This is followed by careful sweeping and cleansing, and the houses and gates are decorated with green boughs. For three days afterwards the thread is maintained unbroken, and no one is allowed to enter or leave the village. The theory seems to be that if the demon who presides over the malady can be kept at bay for that time, he will go away disappointed, while a breach of the quarantine or *khang* would lead to a renewal of the out-break.

Tiyar

Tiyars are almost to a man Vaishnava in creed, their religious ceremonies being always held beneath trees. The scorhá (*Trophis aspera*), a very common scrubby plant, is held in especial veneration by them, and its shade is usually selected as the scene of their worship; but should this tree be not at hand, the nim, bel, or gujálí (*Shorea robusta*) forms an efficient substitute. Hindustani Tiyars sacrifice a goat to Káli on the Diwáli, but the animal, instead of being decapitated in the orthodox Hindu way, is stabbed with a sharp-pointed piece of wood—a practice universal among the aboriginal races of India, after which, as with the Dosadhs, the flesh is eaten by the worshippers. Bengali Tiyars, on the other hand, sacrifice a swine to Bura Buri on the Paus (December-January) Sankranti—slaughtering it in the same way as their Hindustani brethren. They do not, however, eat the flesh. At the Gangá festival in Jeth (May) they offer a white kid, pigeon and milk to the spirit of the river, and adore with great solemnity Manasú Devi in the month of Srávan (July-August).

As was natural, the Tiyars have peopled the waters and streams with beneficent and wicked spirits, whose friendship is to be secured, and enmity averted, by various religious rites. Along the banks of the river Lakhya they worship Pir Badr, Khwajah Khizr, and, in fulfilment of vows, offer through any Musulmán a goat to Madár, whom they regard as water god, but who may be identified with Sháh Madár Bad'uddin. In stormy weather and in bad fishing seasons they invoke Khala-Kumari, a naiad, to whom the first fruits are presented, in the same way as Hindus do to Lakshmi. In Bihar Mangal Chandí, Jai Singh, and Lal are their chief minor gods.

In Purneah Tiyars worship a peculiar deity called Prem Rája or Pamiráj, who, they say, belonged to their tribe and was a celebrated brigand residing at Baburagar, in Tirhut. Having been on many occasions favoured by the deity, he was translated (Aprakása), and disappeared along with his boat. In 1864 one Baijua Tiyar gave out that Pamiráj had appeared to him in a vision and ordained that the Tiyars should cease to be fishermen and devote themselves instead to certain religious rites, which would procure general prosperity. Great excitement ensued, and in February 1865 about four thousand Tiyars from Gházipúr, Benares, and the adjoining districts assembled at Gogra, in Purneah, and after offering holy water to a private idol belonging to Baijua, which he said came to him out of a bamboo post, 3,000 goats were sacrificed. Shortly afterwards another meeting of the tribe was held in the Benares district, at which a murder was committed. This movement was a repetition of a precisely similar one among the Dosadhs of Bihar in 1863, and, like it, was short-lived and unsuccessful.

As is done by all Bengali fishermen, the Jal Pálaní, on the "Tilwá" Sankranti in Mágh (January-February), when the sun enters Capricorn, is observed by the Tiyars. The close time lasts from two to fifteen days, but the demand for fish being steady, they catch on the eve of the festival an extra supply and keep them alive for purposes of sale, there being no offence in selling, although there is in catching, fish at that period, when prices being high profits are unusually good.

CHAPTER IX.

Marriage.

Part I.—Descriptive.

692. Among the various causes which contribute to the growth of a race or the making of a nation by far the most effective and persistent is the *jus connubii*—the body of rules and conventions governing inter-marriage. ^{Searching influence of marriage custom} The influence of these rules penetrates every family; it abides from generation to generation and gathers force as time goes on. The more eccentric the system, the more marked are the consequences which it tends to produce. With men, as with animals, artificial selection is more potent and works more rapidly than natural selection.

693 In no department of life is the contrast sharper between the East and the West, the stationary and the progressive societies, the races of India ^{Contrasts between India and Europe} and the nations of Europe. The first point which strikes an observer is the almost universal prevalence of the married state. In Europe sentiment and prudence exercise divided sway, and the tendency on the whole is rather towards a decline in the number of marriages. In India neither of these motives comes prominently into play. Religion on the other hand, which in the West makes not unfrequently for celibacy, throws its weight in India almost wholly into the other scale. A Hindu man must marry and beget children to perform his funeral rites, lest his spirit wander uneasily in the waste places of the earth. If a Hindu maiden is unmarried at puberty, her condition brings social obloquy on her family, and on a strict reading of certain texts entails retrospective damnation on three generations of ancestors. But the general obligation to marry is hampered by numerous conditions. In the West, the field from which a man can choose his wife is practically unlimited. The restrictions based on consanguinity are few, and all but an insignificant number of marriages are determined by the free choice of persons who have attained physical maturity and believe they know their own minds. In India, throughout the ever widening area dominated by Hindu tradition or influence, one set of rules contracts the circle within which a man must marry; another set artificially expands the circle within which he may not marry; a third series of conventions imposes special disabilities on the marriage of women. A fourth injunction, not as yet universal but constantly gaining ground, forbids a widow to marry again. Under the *régime* of infant marriage, wedded life too often commences before physical maturity has set in and the children thus united make their first acquaintance when they are already husband and wife. Polygamy tempered by poverty, and two forms of polyandry, both tending to disappear under the influence of popular disapproval, complete the series of contrasts between Indian and European marriage customs. We shall consider later on how far the dry figures of the census bear witness to the far reaching consequences of these restrictions on the natural tendencies of the human race. But before examining the statistics it will be of interest to describe more fully the customs alluded to above. Two of these, endogamy and exogamy, are common to all primitive societies. Polyandry and polygamy are found in several societies which are not primitive. Hypergamy, infant marriage, and the prohibition of widow remarriage, are, I believe, peculiar to India. In describing these rules it is impossible to avoid constant reference to the social groups, tribes, castes and the like by which their operation is determined. Marriage is the most prominent factor in the caste system, and the customs which regulate marriage can only be described in terms of caste or of some tribal unit which closely resembles a caste or represents a stage in the process by which caste has been evolved. The only people to whom this remark does not apply are the Burmese and other races of further India. The Muhammadans in most parts of India have been affected in various degrees by the example of Hindu marriage usage; and Native Christians have not always escaped the same pervading influence.

694. The terms endogamy and exogamy—*passablement barbares* as ^{Endogamy} M. Senart has called them—were introduced more than forty years ago by the late

Mr. J. F. McLennan in his well known essay on *Primitive Marriage*. The laws governing marriage which these terms denote, were then unnamed. Mr. McLennan was, I believe, the first to draw attention to them, and the names devised by him have been adopted by all who have since written on the subject. Endogamy, or "marrying in" is the custom which forbids the members of a particular social group to marry any one who is not a member of the group. An endogamous division, therefore, is a group within which its members must marry. The following types of endogamous divisions may be distinguished. The enumeration is probably not exhaustive, but it may serve to illustrate the lines on which the principle of endogamy works in India. —

- I — **ETHNIC** groups, consisting of compact tribes like the Aryan Rājputs of Rajputana, and the Dravidian Mundas, Oráons and Santáls of Chota Nagpur and also including tribes, like the Bhumij, who have adopted Hinduism and transformed themselves into a caste. In the case of the latter, the assumption of a common origin is borne out by what is known of the history and affinities of the tribe, but after having become a caste, its members set to work to strip themselves of all customs likely to betray their true descent. At the same time the substantial landholders, if there are any among the tribe, usually break off from the rest and set up as Rājputs, a designation which outside of Rajputana proper does not necessarily imply any race distinction and frequently means nothing more than that the people using it have or claim to have proprietary rights in land. The local raja of the Bhumij country pretends to be some kind of Rājput, and even the rank and file of the caste prefer the title of Sardār to their proper tribal designation.
- II — **LINGUISTIC OR PROVINCIAL** groups, such as Tamil, Telugu, Bengali, Oriya, and Paschima or Bihari Bráhmans. These classes are very large, and include whole castes, which in their turn are broken up into endogamous sub-castes. Such groups arise partly from the fiction which assumes that men who live in a different part of the country and speak a different language must be of a different race, and probably also in some measures from the inclusion of different stocks under a single caste-name. It can hardly be doubted, for example, that the large and miscellaneous groups included under the name Bráhman have been recruited to some extent from the local priests of tribes which adopted Hinduism.
- III. — **TERRITORIAL OR LOCAL** groups not corresponding to any distinction of language, such as the Rarhi and Barendra Bráhmans, the Uttariya and Dakshini (north and south of the Ganges) Doms of Bihar, the Tamaría and Sikharbhumi Bhumij of Manbhum, and numerous others. It is curious to observe that in some cases these groups are called after ancient territorial divisions, such as Rarh, Barendra, Sikharbhumi, etc., which appear on no map, and the names of which may possibly throw some light upon the early history of India.*
- IV. — **FUNCTIONAL OR OCCUPATIONAL** groups, such as the Mecho and Hāliā or Helo sub-castes of Kaibartta, of whom the former sell fish, while the latter, who have now given themselves brevet rank as Mahishyas, confine themselves to cultivation; and the Dulha, Machhua, and Matial sub-castes of Bāgdis who are distinguished by carrying palanquins, fishing, and labouring as tank-diggers and earth-workers generally. Writing about the Hāliā sub-caste in 1891, I ventured on the conjecture that "this sub-caste will rise in social estimation and will altogether sink the Kaibartta" The forecast has come true. They now call themselves Mahishyas, a name unheard of ten years ago, and pose as a distinct caste.
- V — **SECTARIAN** groups like the Bishnois of Rajputana and the Lingayats of Bombay. These were originally religious sects which have now

* The position of most of these ancient territorial divisions is now fairly well-known. Amongst recent writers on the subject may be mentioned Mr. F. E. Pargiter, I.C.S., and Mahamahopadhyaya Hara Prasad Sastri.

closed their ranks to outsiders and marry only among themselves. As a rule, however, groups based upon religious differences within the range of Hinduism tend not to be endogamous and the evolution of a caste from a sect is a comparatively rare phenomenon

VI.—SOCIAL groups marked off by abstaining from or practising some particular social or ceremonial usage. Thus the Sagahut sub-caste of Sunris (traders and liquor sellers of Bihar) allow their widows to remarry by the maimed rite of *sagar*, while another sub-caste of Sunris forbid widow marriage, and designate themselves *byahut* "the married ones," from *byah*, the full-blown wedding ceremony which no woman can go through twice.

695 In theory all the members of each of the numerous groups included in these classes are regarded as forming a body of kindred, though in any particular instance their pedigree may be extremely obscure. In the first or ethnic class, the racial tie which binds the members together and distinguishes them from other tribes forming part of the same class is palpable and acknowledged, and various legends are current which purport to account for it. In the other classes the tendency towards sub-division which is inherent in Indian society seems to have been set in motion by the fiction that men who speak a different language, who dwell in a different district, who worship different gods, who observe different social customs, who follow a different profession, or practise the same profession in a slightly different way, must be of a fundamentally different race. Usually, and in the case of sub-castes, invariably, the fact is that there is no appreciable difference of blood between the newly-formed group and the larger aggregate from which it has been broken off. Influence of fiction

696. For reasons which need not be entered upon here, complete statistics of these countless divisions are never likely to be available. But many of them are known to be exceedingly small, and even the larger ones, when distributed over a large area of country, may be so scantily represented in a given locality that the number of possible marriages open to their members must be inconveniently restricted. Size of endogamous groups

697. The disintegrating influence of the constant creation of separate communal groups has not escaped the notice of Indian social reformers. In an able paper on the fusion of sub-castes in India Lala Baijnath Lal, Judge of the Court of Small Causes in Agra, has pointed out the harm which they do "physically by narrowing the circle of selection in marriage, intellectually by cramping the energies, and morally by destroying mutual self-confidence and habits of co-operation." The suggestion is sound in itself and is put forward with conspicuous moderation. Its author wisely refrains from advocating inter-marriage between members of different castes and lays stress on the necessity of proceeding gradually and commencing with the smallest groups. But clearly his plan will only meet those cases where the *jus convivii* is wider than the *jus connubii*. Ordinarily no doubt, when people will not eat together still less will they intermarry. But this is not always the case. Among the Agarwals, for instance, members of different religious sects intermarry but do not eat together. At marriage the wife is formally admitted into her husband's sect and must in future have her food cooked separately when she stays with her own people. A well-known proverb says of the Kanauja Bráhmans of the United Provinces—*Tin Kanauja tera chulha*, "Three Kanaujas want thirteen cooking places", implying that their notions on the subject of ceremonial purity are so extreme that they will hardly eat even with their nearest relations. Of these people Lala Baijnath remarks that "the smallness of their various clans causes the greatest difficulty in obtaining husbands for girls except on payment of extortionate sums of money." Mr. Burn, however, informs me that although their usages are not sufficiently defined to be capable of clear description the groups which cannot eat together are much smaller than those which cannot intermarry. In both cases, therefore, the change suggested would aggravate the very evil which it is intended to cure. Both serve to illustrate the diversity and intricacy of social usage in India and the dangers which beset the path of any one who seeks to introduce what at first sight may seem to be a most obvious reform. Proposed fusion of sub-castes

698. Exogamy, or "marrying out" is the custom which forbids the members of a particular social group, usually supposed to be descended from a common ancestor, or to be associated with a certain locality, to marry any one who is a Exogamy

member of the same group. An exogamous division therefore is a group outside of which its members must marry.

The following classes of exogamous divisions are found in India. —

- I — Totemistic, being the names of animals, plants, etc., such as *Hansda*, wild goose, *Hemron*, betel palm. A man of the *Hansda* division may not marry a woman of that division and so on. These totemistic divisions are confined for the most part to tribes and castes of Dravidian descent.
- II.—Eponymous, the ancestor who gives his name to the group being either a Vedic saint (as with the Bráhmans and the castes who imitate them), or a chief of comparatively modern date, as with the Rájputs and others.
- III — Territorial, referring either to some very early settlement of a section or to the birthplace of its founder: prevalent among the Rájputs and the trading castes supposed to be allied with them and found also among the Kandhs of Orissa and the Nagas of Assam in a very primitive form, the sept there residing in the local area whose name it bears
- IV.—Local, communal, or family sections of small size and comparatively recent origin.
- V.—Titular, or nickname groups referring to some personal adventure of the founder of the sept or to some office which he is supposed to have held

Besides these we also find castes which have no sections of any kind, or, which comes to the same thing, have only one section and habitually marry within it and simply reckon prohibited degrees in much the same way as we do ourselves.

Its effect on
selection

699. We have seen that endogamy restricts intermarriage in one direction by creating a number of artificially small groups within which people must marry. Exogamy brings about the same result by artificially expanding the circle within which they may not marry. Here again no complete statistics are available. But in certain proceedings held in Madras in connection with the classification of the Kamalakara caste of Tanjore immigrants from the Deccan, who call themselves Saurashtra Bráhmans, it was stated that their exogamous divisions contained about 2,000 persons. And a somewhat similar result may be arrived at by calculation for the sub-castes of Bráhmans in Bombay. Compare these figures with the largest number of persons that can be imagined to be excluded by our own table of prohibited degrees and the contrast is sufficiently striking. The calculation, however, understates the case. As has often been pointed out, exogamy is one-sided in its operation. In no case may a man marry into his own group, but the name of the group goes by the male side, and consequently, *so far as the rule of exogamy is concerned*, there is nothing to prevent him from marrying his sister's daughter, his maternal aunt, or even his maternal grandmother.

Prohibited
degrees

700 To bar alliances of this kind, a separate set of rules is required, which usually overlap the exogamous rule to some extent. Marriage with any person descended in a direct line from the same parents is universally forbidden. To simplify the calculation of collateral relationship—a complicated business which severely taxes the rural intellect—the following formula is in use throughout Behar — *Chachera, mamera, phuphera, masera ye char nata bachake shadi hote hai*, “the line of paternal uncle, maternal uncle, paternal aunt, maternal aunt—these four relationships are to be avoided in marriage.” The first point to notice in this is, that in the first generation the whole of the paternal uncle's descendants, both male and female, would be excluded by the rule prohibiting marriage within the section. In the second and subsequent generations, agnates would be barred, but descendants through females would not. For the paternal uncle's daughters, having necessarily married out of the section, their children would belong to some other section, and thus second cousins would be able to marry. Another point is that the formula does not state the number of generations to which the prohibition extends, and that different castes supply this omission in different ways. Non-Aryan races generally incline to laxity. The Santáls, for example, in the Sonthal Parganas, are said to make up for their sweeping prohibition on the

father's side by allowing very near alliance on the mother's side—a fact pointedly exemplified in their proverb "No man heeds a cow-track, or regards his mother's sept" Many castes, again, exclude a smaller number of generations on the female side, while others profess to prohibit inter-marriage so long as any relationship, however remote, can be traced between the parties

701 Hypergamy, or "marrying up" is the custom which forbids a woman of a particular group to marry a man of a group lower than her own in social standing, and compels her to marry in a group equal or superior in rank. A hypergamous division, therefore, is a group forming part of a series governed by the foregoing rule. The men of the division can marry in it or below it; the women can marry in it or above it

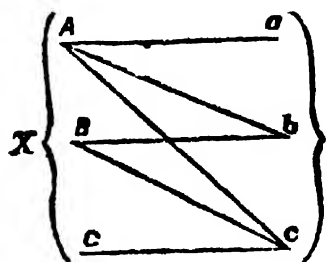
The following are instances of hypergamous divisions.—

- (a) The four original classes (varnas) as depicted in the somewhat contradictory utterances of the law books, which seem to deal with a period of transition when caste was being gradually evolved out of a series of hypergamous classes. Thus one set of passages in Manu, Baudháyana, Vishnu, and Nárada allows a Bráhmaṇ to marry in succession a woman of each of the four castes, while other texts from the same authorities forbid him to marry a Sudra woman. According to Baudháyana, Gautama, and Usanas marriages in which the wife was only one grade below the husband were freely admissible and the children took the rank of the father, so that the son of a Vaisya by a Sudra woman was counted a Vaisya. On the other hand, all authorities agree in reprobating marriages between men of lower classes and women of higher.
- (b) The groups Kulin, Siddha-Srotriya, Sádhyā-Srotriya, and Kashta-Srotriya among the Rárhī Bráhmaṇs of Bengal as organized by Ballal Sen. The rule was that a man of the Kulin class could marry a woman of his own class or of the two higher Srotriya classes, a Siddha-Srotriya could marry in his own group or in the Sádhyā-Srotriya group; but the Sádhyā- and Kashta-Srotriyas might take wives only within the limits of their own classes. Conversely, women of the Sádhyā-Srotriya class could marry in their own class or the two classes above them, Siddha-Srotriya women in their own class or in the Kulin class, while Kulin women at one end of the scale and Kashta women at the other were restricted in their choice of husbands to the Kulin and Kashta groups.
- (c) Among the Maráthas families belonging to groups such as Kadam Bándé, Bhosle, Powar, Nimbalkar, etc., whose ancestors rose to power during the Marátha ascendancy, will not give their daughters in marriage to Maráthas of lower social position. In some cases intermarriage has been entirely broken off, and the group is converting itself into a caste which claims descent from the traditional Kshatriyas.
- (d) A curious development of hypergamy has taken place of recent years among the Pods, a cultivating and fishing caste very numerous in the districts near Calcutta. Those Pods who have taken to English education and become clerks, pleaders, doctors, and the like, refuse to give their daughters in marriage to their agricultural and fishing caste-fellows, though they still condescend to take brides from the latter. The case is closely parallel to that of the Mahishya Kaibarttas mentioned above, and is of interest as exhibiting an earlier stage in the process of caste making. The educated Pods, it will be observed, have not completely separated from the main body of their caste; they have merely set up for themselves a special *jus connubii*, the right of taking girls without giving them in return, like the three higher classes in the traditional Indian system. Their number being comparatively small, they probably have not women enough to meet their own needs. But this will right itself in course of time, and they will then follow the classical precedent of the twice-born classes and will marry only within their own group. Later on they will start a distinctive

name, probably a pretentious Sanskrit derivative, and will disclaim all connexion with the Pods. They will then have become a caste in the ordinary acceptation of the word and in a generation or two their humble origin will be forgotten.

Influence of
hypergamy

The examples given above show the custom of hypergamy to be of great antiquity and to prevail in India over a very wide area at the present day. Its theoretical working is perhaps best illustrated by the diagram in the margin.



Let X represent a caste divided into the three hypergamous groups A, B, and C. Within each group the capital letters stand for the marriageable men, and the small letters for the marriageable women of the group. The horizontal and diagonal lines connecting the capitals with the small letters show what classes of men and women can intermarry. It will be seen that a man of the A group can marry a woman of his own or of the two lower groups; a man of B can marry into B or C, while a man of C

is confined to his own class, and cannot marry a woman from either of the classes above him. Conversely, a woman of the C class can get a husband from A, B, or C, and a woman of the B class from A or B, but a woman of the A class cannot find a husband outside of her own group. Excluding polygamy and polyandry, and supposing the women of each group to be evenly distributed among the groups they are entitled to marry into, the result of the first series of marriages would be to leave two-thirds of the women in the A group without husbands, and two-thirds of the men in the C group without wives. Of course in practice the system does not work in this mechanical fashion. Husbands are at a premium in the upper groups and become the object of vigorous competition; the bride-price of early usage disappears and is replaced by the bridegroom-price now paid among most of the higher castes in India. The rich get their daughters married above their proper rank; poorer people are driven to reckless borrowing or in the last resort to other means if they would avoid the disgrace of letting their daughters grow up unmarried. There are unhappily several ways of redressing the unequal proportions of the sexes and putting artificially straight what has been artificially made crooked. One approved way is for the parents to kill, or to make no attempt to keep alive, all female infants except those for whom they can make sure of finding husbands. This is what the Rājputs of Northern India used to do until a law was passed making things unpleasant for any village which could not show a respectable proportion of girls. The practice seems to be as old as the Yajur Veda, which speaks of female infants being exposed when born; while the remark in the Atharva Veda that the birth of a daughter is a calamity may perhaps imply that then as now infanticide was connected with the difficulty of getting daughters suitably married.

Another method is that of wholesale polygamy, such as was practised by the Kulin Brahmans of Bengal a couple of generations ago. Several middle-aged Kulins are known to have had more than a hundred wives, and to have spent their lives on a round of visits to their mothers-in-law. For each wife they had received a handsome bridegroom-price, diminishing in amount with the number of wives they had at the time of the marriage; they made what they could out of each periodical visit, and they asked no questions about the children. The system, I am informed, has even now not wholly died out, but it prevails on a less outrageous scale, and educated opinion condemns it forcibly.

Origin of
hypergamy

702 The origin of the custom of hypergamy is obscure. We find it in full force at the time of the law-books, the earliest of which are believed by Bühler to be somewhat anterior to the fourth and fifth Centuries B.C., and it has been shown to be fully alive at the present day. It is curious that a practice which extends over so long a period and is so intimately connected with the evolution of caste should have escaped the notice of all modern writers on the early history of marriage. The authors of the law-books give no account of the causes which produced it, nor would one expect them to do so. They merely say that marriages between men of a higher class and women of a lower class are according to the order of nature (*anuloma* 'with the hair') while marriages of converse type are *pratiloma* 'against the hair'.

or unnatural. The usage seems to be one which might arise wherever an invading race, bringing with it comparatively few women, took captives from among the people whose territory they occupied. Captured women would become the wives or concubines of their captors; male captives if not slain offhand, would be kept as slaves and would in no case be accepted as husbands for the daughters of the conquering race. One may say, indeed, that wherever slavery has prevailed or wherever one race has established a marked political ascendancy over another, there hypergamy has necessarily established itself. The mixed or coloured races of America, Mulattoes, Quadroons, Mestizos and the like were, in the first instance at any rate the offspring of hypergamous unions, corresponding to the *anuloma* marriages of the Indian law-books. The fathers were Spaniards or Englishmen, the mothers Indians or Negresses. In Rajputana hypergamy appears to be associated with territorial sovereignty and the possession of landed property. In theory all Rájputs are equal within the tribe, but ruling chiefs will only give their daughters to men of their own class, and a landowning Rájput, deeming himself no doubt a chieftain in a small way, will not accept a landless man as his son-in-law. A curious story, which seems to belong to the same order of ideas, is told in the Punjab to account for the hypergamous status of one of the Ját clans. One day, it is said, as the Emperor Akbar was out hunting, he came suddenly upon a Ját woman who was standing by a well with a heavy jar of water on her head and a full grown buffalo and its calf on either side of her. The Emperor's cavalcade frightened the animals and they prepared to break away. But the sturdy Jatni was equal to the emergency. With one hand she seized the buffalo and held it by a horn, with the other she steadied the jar of water on her head, while she secured the calf by putting her foot on its tethering rope. Seeing this display of strength and presence of mind the Emperor exclaimed "a woman like that should be the mother of heroes" and shortly afterwards took her to wife in due form. Her people had places of honour given them at an Imperial Darbar, and the clan has been known ever afterwards as Akbari or Darbari Játs, ranking at the top of the hypergamous system of the tribe, taking wives from other clans but giving their daughters to none.

Whatever may have been the origin of the custom, whether slavery, conquest, racial superiority, or territorial supremacy gave it the first impulse, it is clear that, in any locality where it got started, the principle would be likely to extend itself by the operation of imitative fiction to the connubial relations of all classes not absolutely equal in rank. This is what seems to have happened in several parts of India, and the influence which the custom has exercised is seen in the distribution of the sexes and the development of caste. Here, however, we are concerned only with its effect on marriage.

703 Of all the peculiar usages which are associated with marriage in India none has impressed itself so distinctly on the census statistics as the custom which prohibits the second marriage of a widow and the convention enjoining the marriage of a daughter before she attains physical maturity. In the case of the higher castes both of these usages may claim a respectable antiquity. In the lower strata of society, on the other hand, they appear to have been developed in the form which they now assume at a comparatively recent date under the pressure of peculiar social conditions. Both, again, are looked upon by the people who observe them as badges of social distinction, and to the fact that they are regarded in this light is mainly due their rapid extension within the last two or three generations. No excuse therefore is needed for examining their prevalence and its causes in some detail.

704. For the ultimate origin of the prohibition of widow marriage among the higher castes we must look back, far beyond the comparative civilization of the Vedas, to the really primitive belief that the dead chief or head of the family will need human companionship and service in that other world which savage fancy pictures as a shadowy copy of this. To this belief is due the practice of burning the widow on the funeral pile of her dead husband which is referred to as an "ancient custom" (*dharma purana*) in the Atharva Veda.* The directions given in the Rig Veda for placing the widow on the pile with her husband's

Widow and
infant
marriage

Prohibition
of widow
marriage
unknown in
Vedic times

* "Atharva Veda," 18, 3, 1, quoted by Zimmer, *Altindisches Leben*, p. 331.

corpse, and then calling her back to the world of life, appear, as Tylor * has pointed out, to represent “a reform and a re-action against a yet more ancient savage rite of widow sacrifice, which they prohibited in fact, but yet kept up in symbol.” The bow of the warrior and the sacrificial instruments of the priest were thrown back upon the pile to be consumed; the wife, after passing through the mere form of sacrifice, was held to have fulfilled her duties to her husband and was free to marry again. A passage in the Rig Veda quoted by Zimmer † shows that in some cases, at any rate, the widow married her husband’s younger brother (*devar*), and it is not unreasonable to suppose that her obligations in this respect were very much what we now find among the castes which permit widow marriage.

Causes of its
revival

705 At this point the historical record, such as it is, breaks off, and conjecture alone can divine the precise motives which induced the Brāhmins of a later age to revive that custom of primitive savagery which their ancestors had expressly condemned. Closer contact with more barbarous races, the growth of the sacerdotal spirit, the desire, as Sir Henry Maine has suggested, to get rid of the inconvenient lien which the widow held over her husband’s property, may all have contributed to this result. But when widow sacrifice had been thus re-introduced, it is *primâ facie* unlikely that it should have been enforced with that rigid consistency which distinguishes the true savage; and, in fact, the texts prescribed for the widow the milder alternative of a life of ascetic self-denial and patient waiting to join the husband who has gone before. According to some authorities, they also recognize, though as a less excellent path than the two former, the alternative of re-marriage.

Considera-
tions of
property, of
spiritual
benefit, of
sacramental
doctrine

706 I will not attempt to enter upon the controversy as to the precise meaning of the passage in Parasara’s Institutes, on which the modern advocates of widow marriage rely, still less to discuss its applicability to the present age of the world. It seems more profitable to state the causes which, irrespective of isolated texts, would in any case have favoured the growth of the modern custom which forbids the widows of the highest castes to marry again, and which shows signs of extending itself far beyond its present limits, and finally of suppressing widow marriage throughout the entire Hindu community of Bengal. Some, at any rate, of these causes are not far to seek. In the first place, the anxiety of the early Hindu law-givers to circumscribe a woman’s rights to property would unquestionably tend to forbid her to join her lot to a man whose interest it would be to assert and extend those rights as against the members of her husband’s family. At the same time the growth of the doctrine of spiritual benefit would require her to devote her life to the annual performance of her husband’s ‡ *śradh*. Technical obstacles to her remarriage also arise from the Brāhmanical theory of marriage itself. That ceremony being regarded as a sacrament ordained for the purification of women, and its essential portion being the gift of the woman by her father to her husband, the effect of the gift is to transfer her from her own *gotra* or exogamous group into that of her husband’s. The bearing of this transfer on the question of her remarriage is thus stated by an orthodox Hindu at pages 276-277 of the *Papers relating to Infant Marriage and Enforced Widow-hood* published by the Government of India —

“Her father being thus out of the question, it may be said that she may give herself in marriage. But this she cannot do, because she never had anything like disposal of herself. When young she was given away, so the ownership over her (if I may be permitted to use the phrase) vested then in the father, was transferred by a solemn religious act to the husband, and he being no more, there is no one to give her away and since Hindu marriage must take the form of a religious gift, her marriage becomes impossible.”

The argument seems academic, but in the atmosphere of pedantry which pervades Indian Society an academic argument is as good as any other.

Influence of
hypergamy

707. Some influence must also have been exerted in the same direction by the competition for husbands resulting from the action of hypergamy. Widows certainly would be the first to be excluded from the marriage market, for in their case the interests of the individual families would be identical with those of the group. The family would already have paid a bridegroom-price to get

* Primitive Culture, i, 366

† Altindisches Leben, p. 329. See also Oldenberg, *Die Religion des Veda*, 575 and Macdonell, *History of Sanskrit Literature*, 120. Jolly, *Recht und Sitte*, 59, seems to take a different view.

‡ Tagore Law Lectures, 1879, pp. 187, 188

their daughter or sister married, and would naturally be indisposed to pay a second, and probably higher, price to get her married again. The group, in its turn, would be equally adverse to an arrangement which tended to increase the number of marriageable women. Members of the higher castes, indeed, have frequently told me that these reasons of themselves were sufficient to make them regard with disfavour the modern movement in favour of widow marriage. For, said one of them, we find it hard enough already to get our daughters married into families of our own rank, and things will be worse still if widows enter the competition with all the advantages they derive from having got over their first shyness, and acquired some experience of the ways of men. The sentiments of Mr. Weller sounded strange in the mouth of a Kulin Bráhmaṇ, but the argument was used in entire good faith, and was backed up by much lamentation over the speaker's ill-luck in being the father of four daughters, all unmarried.

708. The considerations stated above are entitled to whatever support they may derive from the fact that the Muhammadans and those Hindu castes which Practice of lower castes permit widows to remarry know nothing of the custom of hypergamy, and as a rule pay for brides, not for bridegrooms. Among those groups the normal proportion of the sexes, whatever that may be, at the age of marriage has not been affected by any artificial divisions, and there is every reason to believe that widows who are in other respects eligible have no particular difficulty in finding husbands. Polygamy prevails on a limited scale, and a larger proportion of the men have two wives, the second wife being often a young widow chosen by the man himself for her personal attractions, after the first wife, whom his parents selected for him, has lost her looks and become little more than a household drudge. Another point is that the lower castes seem to have a greater capacity than the higher for throwing off sub-castes. Deviations from caste usage, trivial changes of occupation, settlement outside the traditional habitat of the caste, and a variety of similar causes which, in the higher castes, would, as a rule, merely affect the standing of certain families in the scale of hypergamy, tend in the lower castes to form endogamous groups, the members of which intermarry only among themselves. The difference is important, as the latter process does not disturb the balance of the sexes, and the former does.

709. The present attitude of the Hindu community towards proposals to recognize and extend the practice of widow marriage may, I think, be briefly stated somewhat to the following effect —The most advanced class of educated men sympathise in a general way with the movement, but their sympathy is clouded by the apprehension that any considerable addition to the number of marriageable women would add to the existing difficulty and expense of getting their daughters married. Below these we find a very numerous class who are educated enough to appreciate the prohibition of widow marriage supposed to be contained in certain texts, and who have no desire to go behind that or any similar injunction in support of which tolerably ancient authority can be quoted. Then come the great mass of the uneducated working classes, with rather vague notions as to the Shastras, but strong in their reverence for Bráhmaṇs and keen to appreciate points of social precedence. To them widow marriage is a badge of social degradation, a link which connects those who practise it with Doms, Bunas, Bagdis and "low people" of various kinds. Lastly, at the bottom of society, as understood by the average Hindu, we find a large group of castes and tribes of which the lower section is represented by pure non-Aryan tribes practising adult marriage and widow remarriage, while the upper section consists of castes of doubtful origin most of whom, retaining widow marriage, have taken to infant marriage, while some have got so far as to throw off sub-castes distinguished by their abstention from widow marriage.

It is not suggested that the groups indicated above can be marked off with absolute accuracy. But without insisting upon this, it is clear that the tendency of the lower strata of Hindu society is continually towards closer and closer conformity with the usages of the higher castes. These alone present a definite pattern which admits up to a certain point of ready imitation, and the whole Bráhmaṇical system works in this direction. Of late years, moreover, the strength of the Hinduising movement has been greatly augmented by the improvement of communications. People travel more, pilgrimages can be more easily made, and the influence of the orthodox section of society is thus

much more widely diffused. Railways which are sometimes represented as a solvent of caste prejudices have in fact enormously extended the area within which those prejudices reign supreme.

Prevalence
of infant
marriage

710 The practice of infant marriage has spread much further and taken root more deeply among the lower castes than its social complement, the prohibition of widow marriage. Both customs, the positive as well as the negative, have been borrowed from the higher castes, and are now regarded as paths leading towards social distinction. But the one is much easier to follow than the other. A man must get his daughter married at latest when she is fourteen or fifteen years old. To marry her five or six years earlier causes him no particular inconvenience, and confers on him whatever consideration may attach to religious orthodoxy and social propriety. On the other hand, to stop the remarriage of widows, in castes where the balance of the sexes has not been disturbed by hypergamy, must at starting cause some practical inconvenience. Among the lower castes women are much more of a power than they are among the higher; they assert themselves freely on a variety of public occasions, and in many cases they have secured for themselves the right to initiate proceeding for divorce. One can hardly doubt that their influence would be exercised in favour of widow marriage, and that it would tend on the whole towards keeping that institution alive. Some allowance must also be made for the fact that the lower castes do not keep their women in seclusion. A good-looking widow shut up in the family *zenana* can be more easily sacrificed to notions of social propriety than a woman who goes out and meets possible suitors every day of her life. To whatever cause the difference may be due, it is certain that of two customs, both adopted under pressure of the same motives, the one—infant marriage—is almost universal, while the other—the prohibition of widow marriage—has at present only a comparatively limited currency. Infant marriage in fact is now so widely diffused as to have almost entirely displaced adult marriage within the limits of the caste system proper. The Dravidian races of Chota Nagpur, the Central Provinces and the Madras hills, the Mongoloid tribes of the Himalayan region, Assam and Burma, still maintain a system of courtship and marriage between full-grown youths and maidens which has been minutely described by several sympathetic observers. Directly we leave these tolerably compact tribes and pass on to the less definite groups which form a debatable land between the tribe and the caste, we find either infant marriage in undisputed possession or a mixed system prevailing, which tolerates adult marriage as a resource open to those who cannot afford to do anything better for their children, but at the same time enjoins the more respectable custom of infant marriage for all parents whose circumstances admit of it.

Origin of
infant
marriage

711 In the case of the lower castes there is little room for doubt that the custom of infant marriage has been consciously borrowed from the higher castes in obedience to that tendency to imitation which we may almost describe as an ultimate law of the caste system. But how did the higher castes come by a custom which is without a parallel, at any rate on so large a scale, elsewhere in the world, and which cannot be referred to any of those primitive instincts which have usually determined the relations of the sexes? Neither sexual passion nor the desire for companionship and service can be called in to account for a man marrying a girl at an age when she is physically incapable of fulfilling any of the duties of a wife. Primitive man knows nothing of infant marriage, nor is it easy to conceive how such an institution could have arisen in the struggle for existence out of which society has been evolved. The modern savage woos in a summary and not over delicate fashion a sturdy young woman who can cook his food, carry baggage, collect edible grubs, and make herself generally useful. To his untutored mind the Hindu child-bride would seem about as suitable a helpmate as a modern professional beauty. If, then, infant marriage is in no way a normal product of social evolution, and in fact is met with only in India, to what causes shall we look for its origin? The standard Bráhmancial explanation is palpably inadequate. It represents marriage as a sort of sacrament, of which every maiden must partake in order that she may cleanse her own being from the taint of original sin, that she may accomplish the salvation of her father and his ancestors, and that she may bring forth a son to carry on the domestic worship (*saora privata*) of her husband's family. So far as marriage itself goes, all this is intelligible enough

as a highly specialised development of certain well-known ancient ideas. But it does not touch the question of age. Granted that the begetting of a son is essential for the continuance of the *sacra privata*, as Greek and Roman examples teach us, why should the householder, on whom this solemn duty devolves, go out of his way to defer its fulfilment by marrying a girl who has not yet attained the age of child-bearing? The Bráhmán will reply that the earlier in a girl's life she accomplishes her mystical functions the better. But this clearly belongs to the large class of *ex post facto* explanations of which sacerdotal and legal literature is in all ages and countries so full. The priests and lawyers who compile the text-books find certain customs in force, and feel bound to invent reasons for their existence. Being unfettered by the historical sense, and disposed to give free play to their inner consciousness, it is hardly surprising that their reasons should be as often false as true.

712. An explanation of a more scientific character put forward by Mr. Nesfield in 1885 seeks to connect the custom with communal marriage and the practice of capturing wives. On this theory infant marriage was consciously introduced with the object of protecting the child wife from the stain of communism within the tribe and from the danger of being forcibly abducted by a member of an alien tribe. It was, in fact, a revolt against primitive usages which the moral sense of a more civilised generation had begun to condemn. The argument is ingenious, but it does not fit the facts we have to deal with. The society depicted in the Rig and Atharva Vedas must have got far beyond the stage of communal marriage and forcible abduction of wives. Courtship of a very modern type was fully recognized, and the consent of the girl's father or brother was sought only after the young people had themselves come to an understanding. As an additional and conclusive indication that the kind of marriage contemplated by the Vedas was the *individual* marriage of comparatively advanced civilization, I may refer to a remarkable custom, traces of which have survived in modern Italy—the lustration of the bride's night-dress after the wedding night.* Such a custom is clearly incompatible with communal marriage, and could only have arisen in a society which set a high value on female chastity and had left primitive communism (if, indeed, such a condition ever existed) ages behind.

713. The change from this Arcadian state of things to a régime of infant marriage seems to have taken place at a very early date. According to Baudháya a girl who is unmarried when she reaches maturity is degraded to the rank of a Sudra and her father is held to have committed a grave sin by having neglected to get her married. This rule is common to all the law-books, and many of them go further still and fix a definite age for the marriage of girls. The later the treatise the earlier is the age which it prescribes. According to Manu a man of thirty should marry a girl of twelve, and a man of twenty-four, a girl of eight. Later writers fix the higher limit of age in such cases at ten years or eight years, and reduce the lower limit to seven, six, and even four years. What induced people already practising a rational system of adult marriage to abandon it in favour of a rigid and complicated system of infant marriage? In the nature of things no confident answer can be given; the whole question belongs to the domain of conjecture. One can only surmise that the growth of the patriarchal power of the head of the family must have been adverse to any assertion of independence on the part of its female members, and more especially to their exercising the right of choosing their husbands for themselves. Where family interests were involved it may well have seemed simpler to get a girl married before she had developed a will of her own than to court domestic difficulties by allowing her to grow up and fall in love on her own account. The gradual lowering of the position of women from the ideal standard of Vedic times, and the distrust of their virtue induced by the example of pre-matrimonial license set by the Dravidian races must also have had its effect and, as is not obscurely hinted in the literature of the subject, a girl would be married as a child in order to avert the possibility of her causing scandal later on.

Apart from these general causes, a powerful influence must also have been exerted by the custom of hypergamy, which, as has been explained above,

* Zimmer *Altindische Leben*, p. 314, *Gubernatis Usi Nuziali*, p. 234.

limits the number of possible husbands for the girls of the higher classes and thus compels the parents to endeavour to secure appropriate bridegrooms as soon as possible.* That this motive operates strongly at the present day is plainly stated by one of the writers in the official publication already referred to,† who says:—

“Under these circumstances, when, in the case of a daughter, parents see that, unless they marry her at once, the one or two bridegrooms that there are open for their selection would be availed of by others and that they would be disabled from marrying her before the eleventh year, and that they would thereby incur a religious sin and social degradation as regards the caste, they would seize that opportunity to marry their daughter, quite disregarding the evil effects of infant marriages.

Again, when the custom of infant marriage had once been started, under pressure of social necessity, by the families of the highest group, who had the largest surplus of marriageable daughters, a sort of fashion would have been set and would be blindly followed through all the grades.

Two forces are thus at work in the same direction, both tending to disturb the balance of the sexes and to produce abnormal matrimonial relations between the members of different social groups. Enforced competition for husbands on the part of the higher groups, and the desire to imitate their superiors which animates the lower groups, combine to run up the price of husbands in the upper classes; while the demand for wives by the men of the lowest class, which ought by rights to produce equilibrium, is artificially restricted in its operation by the rule that they can under no circumstances marry a woman of the classes above their own. These men, therefore, are left very much out in the cold, and often do not get wives until late in life. An unmarried son does not disgrace the family, but there is no greater reproach than to have a daughter unmarried at the age of puberty. Husbands are bought for the girls, and the family gets its money's worth in social estimation. Bargains, however, must be taken when they are to be had; and no father dares run the risk of waiting till his daughter is physically mature. He is bound to be on the safe side, and therefore he gets her married, child as she may be, whenever a good match offers.

714. Many hard things have been said of infant marriage, and the modern tendency is to assume that a population which countenances such a practice must be in a fair way towards great moral degradation, if not to ultimate extinction. An Indian apologist might reply that much of the criticism is greatly exaggerated, and is founded on considerable ignorance of the present conditions and future possibilities of oriental life. He might point out that in fact, excluding the poetical view that marriages are made in heaven, two working theories of the institution are at present in existence—one which leaves marriages to make themselves by the process of unrestricted courtship, and another which requires them to be made by the parents or guardians of the persons who are to be married. The first, which may perhaps be called the method of natural selection, is accepted and more or less acted up to by all Western nations, except those who follow the French custom of *mariages de convenance*. The second, a system of avowedly artificial selection, is in force, with few exceptions, throughout the East, and assumes its most rigid form in the usages of Hindu society. For all Hindus, except the relatively small number who are influenced by European ideas on the subject of marriage, the bare idea that a girl can have any voice in the selection of her husband is excluded by the operation of three inexorable sanctions—by the ordinances of the Hindu religion, by the internal structure of the caste system, and by the general tone and conditions of social life in India. Religion prescribes that, like the Roman bride of early days, a Hindu girl shall be given (*tradita in manum*) by her father into the power of her husband; caste complications demand that the ceremonial portion of the transfer shall be effected while she is still a child; while the character of society,

* The influence of hypergamy in its simpler form is here referred to. In certain cases, as the practice grows more and more common and eventually becomes the general binding rule the breach of which involves social ruin as is the case with certain sections of Brāhmins and Rāpūts, its effect is to make marriage so expensive that many parents especially those with large families of girls, have not the wherewithal to meet the extortionate bridegroom-price. The result is that amongst such classes girls often remain unmarried until very late in life and all sorts of more or less discreditable expedients, such as Kulinism and marriage by exchange, are resorted to in order to overcome the difficulty. For an account of some of these extreme developments of the practice see Bengal Census Report, paragraphs 435 to 438.

† Papers relating to Infant Marriage and enforced Widowhood in India, p. 178.

the moral tone of the men, the seclusion of the women, the immemorial taboos and conventions of family etiquette, render it impossible that she should be wooed and won like her European sister. Consequently, it may be argued that if any sort of controlling authority is to make people's marriages for them, the earlier it commences and completes its operations, the better. Where the choice of a husband must in any case be undertaken by the parents, it is clearly tempting Providence for them to defer it until their daughter has grown up, and may have formed an embarrassing attachment on her own account. As for love, that may come—and, from all one hears of Hindu unions, usually does come—as readily after marriage as before, provided that opportunities for falling in love with the wrong man are judiciously withheld.

715. When we have shown that a custom is ancient and that it is deeply rooted in the constitution of Indian society it may seem that there is not much more to be said. But the physiological side of the question cannot be left wholly out of account. Looked at from this point of view, what does infant marriage really mean and what are its ultimate tendencies? The physiological side of the question.

Now the first point to realise is, that in different parts of India infant marriage prevails in two widely different forms, one of which is at least free from physiological objections, while the other deserves, from every point of view, the strongest condemnation. The former usage, which is current in the Punjab, is thus described by Sir Denzil Ibbetson, one of the highest authorities on Indian custom and domestic life:—

“Wherever infant marriage is the custom, the bride and bridegroom do not come together till a second ceremony called *mukhlawa* has been performed, till when the bride lives as a virgin in her father's house. This second ceremony is separated from the actual wedding by an interval of three, five, seven, nine, or eleven years, and the girl's parents fix the time for it. Thus it often happens that the earlier in life the marriage takes place, the later co-habitation begins. For instance, in the eastern districts, Jāts generally marry at from five to seven years of age, and Rājputs at fifteen or sixteen, or even older, but the Rājput couple begins at once to co-habit, whereas the parents of the Jāt girl often find her so useful at home as she grows up that some pressure has to be put upon them to give her up to her husband, and the result is that, for practical purposes, she begins married life later than the Rājput bride.”

No one who has seen a Panjabi regiment march past, or has watched the sturdy Jāt women lift their heavy water-jars at the village well, is likely to have any misgivings as to the effect of their marriage system on the *physique* of the race. Among the Rājputs both sexes are of slighter build than the Jāts, but here again there are no signs of degeneration. The type is different, but that is all.

As we leave the great recruiting ground of the Indian army, and travel south-eastward along the plains of the Ganges, the healthy sense which bids the warrior races keep their girls at home until they are fit to bear the burden of maternity seems to have been cast out by the demon of corrupt ceremonialism, ever ready to sacrifice helpless women and children to the tradition of a fancied orthodoxy. Already in the United Provinces we find the three highest castes—the Brāhman, the Rājput, and the Kāyasth—permitting the bride, whether *apta viro* or not, to be sent to her husband's house immediately after the wedding; although it is thought better, and is more usual, to wait for a second ceremony called *gaunā*, which may take place one, three, five, or seven years after the first, and is fixed with reference to the physical development of the bride.

716. What is the exception in the United Provinces tends unhappily to become the rule in Bengal. Here the influence of women's tradition (*stri-āchār*) has overlaid the canonical rites of Hindu marriage with a mass of senseless hocus-pocus (performed for the most part in the women's apartments at the back of the courtyard, which in India, as in ancient Greece, forms the centre of the family domicile), and has succeeded, without a shadow of textual authority, in bringing about the monstrous abuse that the girls of the upper classes commence married life at the age of nine years, and become mothers at the very earliest time that it is physically possible for them to do so. How long this practice has been in force no one can say for certain. Nearly ninety years ago, when Dr. Francis Buchanan made his well-known survey of Bengal, embracing, under Lord Minto's orders, “the progress and most remarkable customs of each different sect or tribe of which the population consists,” he wrote as follows of

one of the districts in Bihar, the border-land between Bengal and the United Provinces :—

“Premature marriages among some tribes are, in Shahabad, on the same footing as in Bengal, that is, consummation takes place before the age of puberty. This custom, however, has not extended far, and the people are generally strong and tall. The Pamar Rájputs, among whom the custom of early consummation is adopted, form a striking proof of the evils of this custom ; for among them I did not observe one good-looking man, except the Raja Jay Prakás, and most of them have the appearance of wanting vigour both of body and mind. This custom, so far as it extends, and the great number of widows condemned by rank to live single, no doubt proves some check upon population.”

In another place Dr. Buchanan says that in respect of marriage customs, Patna—

“is nearly on a footing with Bhagalpur ; but here (in Bihar) the custom of premature marriage is not so prevalent : and it must be observed that in these districts this custom is by no means such a check on population as in Bengal, for there the girl usually is married when she is ten years of age, but in this district the girl remains at her father's house until the age of puberty, and of course her children are stronger and she is less liable to sterility.”

At the beginning of this century, then, we find the premature inception of conjugal relations described by a peculiarly competent observer as an established usage in Bengal, which was beginning to extend itself among the high castes in Bihar. Concerning the state of things at the present day, a highly educated Hindu gentleman, one of the ablest and most energetic of our native officials in Bengal, wrote to me some years ago as follows :—

“It is the general practice—as indefensible as reprehensible under the Hindu scriptures—for a husband and wife to establish co-habitation immediately after marriage. Parents unconsciously encourage the practice and make it almost unavoidable On the second day after marriage is the flower-bed ceremony ; the husband and wife—a boy and girl, or generally, nowadays, a young man and a girl—must lie together in the nuptial bed Within eight days of her marriage the girl must go back to her father's house and return to her father-in-law's, or else she is forbidden to cross her husband's threshold for a year. In a few families the bride is not brought in for a year ; but in the majority of cases this is considered more inconvenient than the necessities of the case would require, and the eight days' rule is kept, so as not to bar intercourse for a year. It would cost nothing worth the reckoning and the good would be immense, if the one-year rule were strictly enforced in all cases, or better, if the interval were increased from one to two years, and the subsidiary eight days' rule expunged from the social code The evil effects of the pernicious custom, which not only tolerates, but directly encourages unnatural indulgences, need no demonstration. Among other things, it forces a premature puberty, and is thus the main root of many of the evils of early marriage, which may be avoided without any affront to religion.”

This opinion—the opinion of an orthodox Hindu of high caste, who has not permitted his English education to denationalise him—marks the social and physiological side of infant marriage in Bengal.

717. The matter is one to be handled with discretion. No one would wish to kindle afresh the ashes of an extinct agitation. Happily there is reason to believe that the leaders of Indian society are fully alive to the disastrous consequences, both to the individual and the race, which arise from premature cohabitation and are anxious to use their influence to defer the commencement of conjugal life until the wife has attained the full measure of physical maturity requisite to fit her for child-bearing. Here the great clans of Rajputana have set an example which deserves to be followed throughout India. Themselves among the purest representatives of the Indo-Aryan type, they have revived the best traditions of the Vedic age and have established for themselves the ordinance that no girl shall be married before she is fourteen years old and that the marriage expenses shall in no case exceed a certain proportion of the father's yearly income. That, I venture to think, is the aim which those who would reform society should, for the present, set before themselves. If they succeed in doing for India what Colonel Walter did for Rajputana by establishing these ordinances they will achieve more than any Indian reformer has yet accomplished. To bring back the Vedas is no unworthy ideal.

Now that infant marriage has ceased to be the monopoly of the higher castes and has filtered down to the lower strata of Indian society, one may fairly ask what in its extended application will be the physiological consequences of this singular institution ? Admitting that in the hands of the more intelligent section of the community possible abuses will be foreseen and guarded against (as over a great part of India they are guarded against now), can we count

upon the masses exercising similar forbearance? Will they not follow blindly the fashion which their betters have set? That is the real danger and the only chance of avoiding it is to be found in the higher castes bringing in a new fashion by raising the ceremonial age of marriage for girls.

718. In the preceding paragraphs an attempt has been made to indicate the more general laws which govern marriage relations in India. These laws apply no doubt in their full force only to Hindus, but their operation is constantly being extended by conscious or unconscious imitation on the part of Animists and Muhammadans. In social as in religious matters the people of India are curiously catholic in their tastes. Just as Muhammadans worship Hindu saints and both Hindus and Musalmans attend and take a more or less active part in each other's religious festivals, so there is a tendency towards the adoption of any matrimonial custom that seems to imply a degree of social superiority. Infant marriage, hypergamy, endogamy and even exogamy are met with among Muhammadans, though the extent to which these usages prevail cannot be defined as closely as among Hindus. Animists again are constantly copying Hindu practices as badges of social distinction. In stating these laws and in endeavouring to give an intelligible explanation of their working it is difficult to avoid the error of making things appear much more simple than they really are. As a matter of fact Indian society is involved in an indescribably intricate network of usages, traditions, covenants, reciprocal undertakings, family compacts and the like, directed towards the all important object of enabling people to get their daughters married in accordance with the minute complications of social and ceremonial distinctions which pervade the entire fabric. Whether it is possible by any kind of description to present an adequate picture of this bewildering organization may be open to question, it assuredly cannot be done within the compass of a Census Report. Certain general laws can be discerned and stated, and some of these have left their mark on the statistics. Others again lie below the surface and do their work by groups of whose numbers no record has been compiled. Infant marriage and the prohibition of widow marriage are instances of the former class. Endogamy, exogamy and hypergamy belong in the main to the latter.

The above laws primarily apply to Hindus but they influence also Muhammadans and Animists.

Part II.—Statistical.

719. The statistics regarding marriage will be found in Imperial Tables VII and XIV. In the former, which was prepared in all provinces and states, civil condition is shown in combination with age and religion, and in the latter with age and caste, Table XIV, however, was optional and although it was prepared in most parts of India, as a rule only a comparatively small section of the

Reference to statistics

Province or State	Population dealt with
Bengal	36,304,525
Central Provinces	10,028,707
Madras	6,539,932
Punjab and N.-W. F. Province	15,967,591
Central India Agency	2,549,126
Rajputana	5,515,568

population was included in its scope. In only six provinces and states, as noted in the margin, did the population dealt with exceed two millions, and in only four more—Assam, Bombay, the United Provinces and Baroda—did it range from one to two millions. The object in view was to illustrate the relative prevalence of the customs of infant marriage and widow remarriage, in different parts of the country and in groups of different social standing, rather than to obtain an exhaustive analysis of the varying practices of each individual caste. In Table XIV, as printed in the Imperial series, a selection has been made from the castes dealt with in the tables for individual provinces. The more important features of the statistics thus collected are exhibited in the following subsidiary tables at the end of the chapter.—

- I.—Distribution by civil condition and age of 1,000 of each sex for provinces and states.
- II.—Distribution by civil condition of 1,000 of each main age period for religions.
- III.—Distribution by civil condition of 1,000 persons of each main age period for main provinces.
- IV.—Distribution of 1,000 of each age and sex by civil condition for selected castes.

V—Proportion of married and widowed amongst Hindus and Muhammadans at certain ages.

VI.—Proportion of the sexes by civil condition.

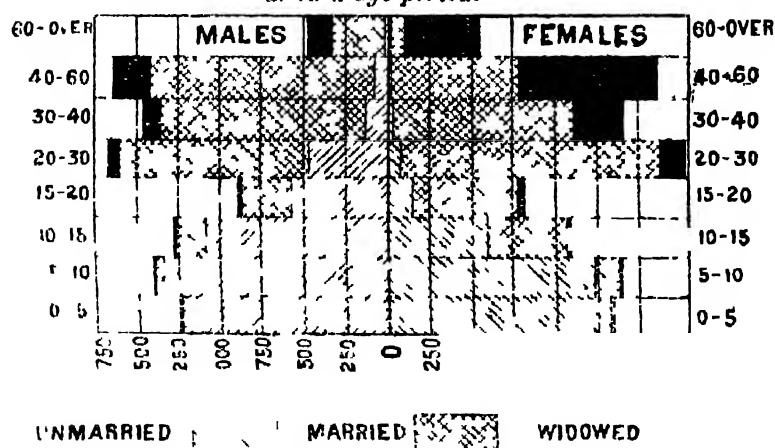
General
review of
main results

720. The most noticeable fact brought out by the statistics is the universality of marriage. Amongst the Hindus this institution is a religious sacrament and the evil consequences which, it is believed, would follow from neglecting it have already been referred to. In the case of Musalmans and Animists the religious sanction is wanting but, as we shall see later, the married state is equally common, though it is not entered upon at such an early age as with the Hindus. Its frequency amongst these communities may be due in part to the influence of Hindu example, but the main reason seems to lie in the general conditions of life in a primitive society where the mere setting up of a house is inexpensive, and a wife is of use, if not an absolute necessity, not only as a domestic drudge, but also as a helpmate in field work, and the like.* Considerations such as these would of course not influence the better classes, but with them also the same state of feeling prevails, and when a boy or a girl approaches adolescence, the chief concern of the parents is to negotiate a suitable match.

Of the males nearly half are unmarried, but a reference to the age details shows that three-quarters of the latter are under 15 years of age, of the males enumerated at the ages 30 to 40, only 1 in 12 is celibate, and between 40 and 60, only 1 in 20. In the case of females the figures are even more striking. Only one-third of the total number are unmarried, and of these three-quarters are under the age of 10 and seven-tenths of the remainder under 15, less than one-twelfth of the females returned as single had completed the fifteenth year of their age. Of those returned in this category at the age periods '15—20,' moreover, the great majority doubtless belong to the earlier part of it, very few females are still unmarried when they attain the age of 20, and of those who are so, save in the case of certain Animistic tribes and of a few sections of some of the higher castes, where hypergamy hinders matrimony, the majority are either persons suffering from some bodily affliction, such as leprosy, blindness or goitre, or concubines, often nominally maid servants,† kept chiefly by members of the castes who forbid widow marriage, or prostitutes, though of the latter many have doubtless returned themselves as married, with reference to some mock ceremony which they have gone through with a dagger, an image or a tree.

721. At the very early ages marriage amongst males, though not unknown, is rare, and even at '10—15' less than 1 male in 7 has a wife; at '15—20' the proportion rises to 1 in 3, at '20—30' to 2 in 3 and at '30—40' to 17 in 20. The fair sex enters on matrimony earlier in life and at '5—10' 1 in 10 is already married, at '10—15' 2 in 5,

Diagram showing the proportion of the married, single and widowed at each age period.



Note.—For the purpose of this diagram the number have been taken

over 40 years of age, at '20—30' only 1 in 25 is widowed and at '30—40' only 1 in 15, compared with 1 in 7 at '40—60' and more than 1 in 4 at the higher ages

* With the Animists, at least, the lower sexual instincts have nothing to do with matrimony as in most cases premarital communism is a recognized social institution.

† There are several castes that are known to have sprung from the illegitimate offspring of maid servants by their high-caste masters, the best known of which is the Shigirdpasha caste of Orissa. Attention has been drawn elsewhere to the prejudice which exists against the remarriage of widows to virgin wives, and this leads to extensive concubinage in a community which does not allow widow marriage.

‡ The actual number of widows is 25,891,936, and that of widowers 8,110,084.

These proportions, however, can be most easily gathered from an inspection of the diagram given above in the margin

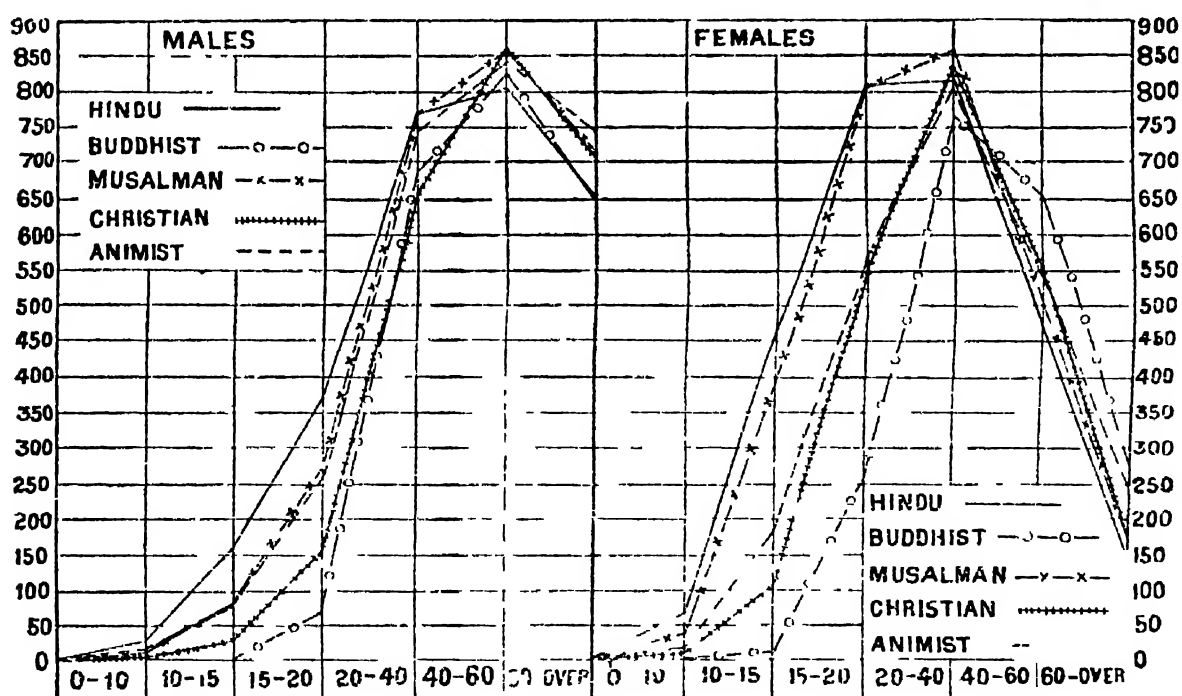
In connection with this branch of the statistics it must be remembered that according to orthodox Hinduism marriage is a religious rite which no woman can go through a second time and, even when allowed, the second marriage is celebrated by a brief and informal ceremony, which, though regarded as sufficiently binding by the parties themselves, might not always be recognized by an enumerator of high caste. Under the rules the enumerators were told to accept without demur the statements of the persons concerned, but they may not always have done so, and it might seem *a priori* not unlikely that sometimes widows who had taken a second husband may still have been entered as widows. As a matter of fact, however, this does not seem to have happened to any appreciable extent.

The great difference between East and West in respect of marriage customs is shown by the fact that in England from three-fifths to two-thirds of both sexes are single and about a third are married, while the proportion of the widowed is only 1 in 30 in the case of males and 1 in 13 in the case of females. Marriage in Europe is far less universal than in India, but the chief source of the difference in the number of the married lies in the later period of life at which the people enter into wedlock, coupled with the greater equality of age on the part of husband and wife, which very greatly reduces the period by which the wife on the average survives her husband. There is moreover no restriction on remarriage, and the success in the matrimonial market of the young and pretty widow is proverbial. In spite of this, however, even in Europe the remarriage of widows is less frequent than that of widowers.

722. We have hitherto been dealing with the general distribution in India at

Variations by
Religion
(1) Hindus

Diagram showing the proportion of the married per 1,000 of each age period by religion



large for all religions taken together, but it will be seen from the subsidiary tables that there are marked differences in the figures for the various religions. The Hindus bulk so largely in the total population and their influence on the general proportions is in consequence so great that the difference between the figures for them and for the population at large is not very striking. The Hindus have fewer unmarried persons and more who are married or widowed, the proportion of the latter in the case of females being nearly 1 in 5, compared with 1 in 6 in the general population. Both sexes also marry earlier and of the unmarried females only one-fourteenth are over the age of 15. At '10-15' nearly half the total number of Hindu females are married and at '15-20' more than four-fifths; the proportion of the married at '20-30' is almost identical with that in the general population, but later on in life it is lower, as fewer who lose their first husband enter a second time into matrimony.

(2) Muham-
madians

723 There are marked differences in the corresponding proportions for Muhammadans. In every 100 males there are 6 more who are single, 4 fewer who have wives and 2 fewer who are widowed. The deficiency amongst the married is, however, due to the later age at which Muhammadans marry, those who do so before the age of 10, and between 10 and 15 are, respectively, barely one-third and one-half as numerous as in the case of Hindus, while from the age of 30 upwards there is in their case an excess of married persons which grows steadily at the higher ages. Among the Muhammadans a wife costs comparatively little to procure and the wedding, being a purely civil matter, is also inexpensive; the field of selection is larger, the practice of hypergamy is almost unknown and, most important of all, widows are allowed to re-marry. A very large proportion of those who in India profess the faith of Islām are the descendants of converts from Hinduism and there is, amongst many sections, a prejudice against the remarriage of widows. It is, however, less widespread than amongst Hindus and it is, to a great extent, confined to a first marriage; there is not usually much objection to a man who has already been married taking a widow as his second consort. The result is that, as a class, Muhammadan widowers remarry much more readily than those who are Hindus.

The differences are even more marked in the case of females. As compared with Hindus, in every 100 Muhammadan females there are 6 more who are spinsters, two wives less and 4 fewer widows. The smaller proportion of the married is due entirely to the relatively small number of child wives. Of Muhammadan girls aged '5—10' only 7 per cent are married, compared with 12 per cent amongst Hindus, and at '10—15' only 39 compared with 47 per cent. On the other hand, at the child-bearing ages, *i.e.*, from 15 to 40, the married women amongst Muhammadans are relatively more numerous; as already stated those who lose their first husband while still capable of having children find it much easier to re-enter the married state, with the result that, whereas 13·7 per cent of the Hindu women enumerated at the ages 15 to 40 were returned as widowed, the corresponding proportion for Muhammadans is only 9·8.

(3) The
Animistic
Tribes

724. The distribution of the Animistic males by civil condition shows a strong general resemblance to that prevailing amongst Muhammadans. In comparison with the latter there is in every 1,000 an excess of 11 bachelors and 8 widowers and a deficiency of 19 who are married. In the case of the widowed the slightly higher proportion for Animists seems to indicate the less frequent, or it may be, less prompt,* remarriage of those who lose their first wife, while the excess of bachelors is in part attributable to a difference in the age distribution and to a larger proportion of young persons amongst the prolific tribes whose beliefs are of this type.

In the case of the weaker sex the similarity is less marked and in every 1,000 Animistic females there are 66 more spinsters, coupled with 52 fewer wives and 14 fewer widows. Marriage is much later even than with Muhammadans, at '10—15' only two-elevenths of the girls are married compared with nearly two-fifths, at '15—20' considerably less than three-fifths compared with four-fifths, while at '20—30' one female in 11 is still unmarried against only 1 in 30 in the case of Muhammadans. At the ages from 15 to 30 taken together the proportion of widows is higher amongst Animists, at '30—40' it is much the same in both cases, while at the higher ages the excess is on the side of the Muhammadans. Owing possibly to the greater freedom which they enjoy the Animistic widows do not appear to remarry so quickly as those of the Muhammadans.

(4) Buddhists

725. The Buddhists of both sexes marry even later than the Animists and the result is that there are more single persons and fewer who are, or have been, married. Of every 100 males 57 are single, 39 married and 4 widowed. Scarcely any males are wedded before the age of 15 and very few before 20, of the total number of males enumerated at ages between 15 and 20 only 2 in 29

* The excess of Animistic widowers, like that of widows, occurs at the ages from 15 to 40, and there are fewer widowers over 60 and fewer widows over 40. These proportions seem to suggest that when an Animist is bereft of his wife he takes longer to console himself than a Muhammadan does. At the same time, as will be shown further on the proportions at the present census have been disturbed so greatly by the famine that any conclusions based on them must be received with caution, at the two previous enumerations there were at all age periods fewer widowers amongst Animists than amongst Muhammadans.

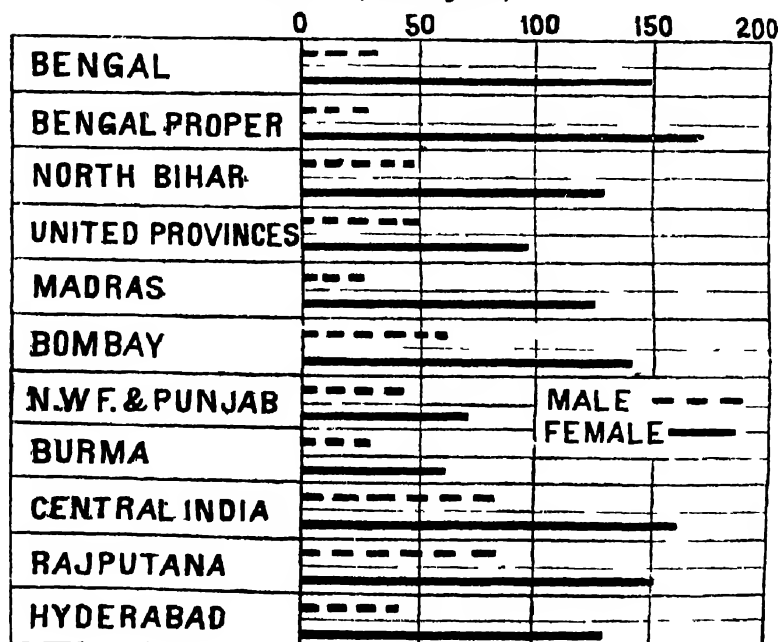
were returned as married. The number then rises rapidly ; at '20—30' nearly three-fifths are married and at '30—40', more than four-fifths, or very nearly the same proportion as amongst Hindus. Widowers are far more rare than amongst Animists until after the age of 60 when they are slightly more numerous.

At all ages taken together 51 per cent. of the Buddhist females are single, 38 per cent. married and 11 per cent. widowed, the difference in comparison with the proportions for Animists being, as before, due entirely to the later age at which girls are given in wedlock. Under the age of 15 marriage is practically unknown, and of those living between 15 and 20 nearly three-quarters were entered as unmarried, while at '20—30' barely one-fifth were thus returned, most of the spinsters in this latter age period probably belonged to the earlier years of it, and most of the married in the previous one were doubtless nearer 20 than 15. The usual age for marriage amongst Buddhist girls would thus seem to lie between 18 and 23. The proportion of the married, as compared with other religions, gradually rises and at '30—40' it exceeds that returned for Hindus, Animists and Musalmans ; even at this time of life the proportion of the unmarried is still relatively high, but on the other hand that of the widowed is much lower than in the case of any other religion.

726. The figures for Christians need not be examined at any length. Owing (5) Christian to the fact that their ranks are being rapidly augmented by new accessions of persons already married or widowed, the distribution by civil condition according to the returns of the census does not afford a very reliable reflex of the customs existing amongst converts of long standing. So far as the figures go, they are very similar to those for Buddhists. The general proportion for males is almost identical, but the Christians marry somewhat earlier (155 are married at '15—20' compared with only 69 in the case of Buddhists) and more frequently take a second wife when deprived by death of the first. In the case of females there are amongst Christians rather more married and widowed and rather fewer single persons ; as with the males a larger number marry while still of immature age, and there is a greater proportion of widows at the higher ages, due partly perhaps to the survival of Hindu prejudices, but possibly even more to the circumstance that widows figure largely amongst the recent converts in the famine tracts.

727 The marriage customs of the people, however, are determined not only by religion but also by locality. The proportion of bachelors, for example, varies from 40 per cent. in Berar to 56 per cent. in Burma and 58 in Cochin, of Benedicks from 38 in Sind and Cochin to 54 in Berar and Bihar, and of widowers from 3 per cent in Orissa to 10 in the Baroda State. Of every 1,000 Hindu males under 10 years of age, 66 are married in Baroda, but none at all in Cochin and Mysore. Eleven per cent. of the Hindu males aged '15—40' are widowed in Baroda, but only 2 per cent. in Orissa and Madras. So also with females. The proportion (all religions) who are single ranges from 25 per cent in Berar to 51 per cent in Burma and that of the widowed from 11 per cent in Burma to 21 per cent. in Bengal proper. The number of child wives is insignificant in Burma, Coorg, Cochin and Travancore, but in Berar one-sixth, and in Bihar nearly one-fifth, of the total number of Hindu females under 10 years of age are married. There are equally great variations in the proportions of the widowed as will be apparent from a glance at the accompanying diagram. The fact is that India is such a large country that it

Diagram showing the number per 1,000 aged 15—40 who are widowed (all religions)

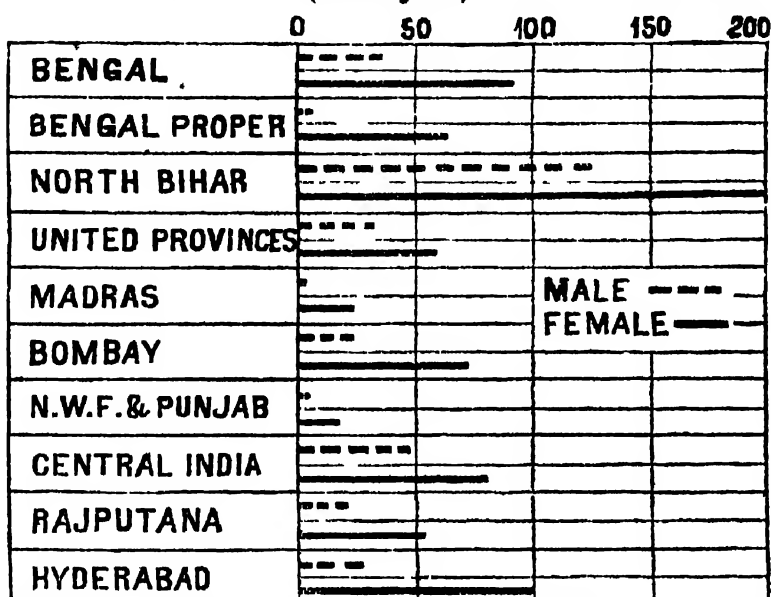


is impossible to generalize from the proportions for the population as a whole, which are merely the arithmetical mean of very diverse conditions prevailing in different parts. Even within the limits of the same province the customs often vary greatly and there is, as will be seen from subsidiary table I, the greatest possible divergence between the marriage customs of Sind and those of the rest of the Bombay Presidency and between those of each of the four main divisions which make up the overgrown province of Bengal. There are thus two lines of cleavage, the one according to religion and the other according to locality, and in order to arrive at any conclusions of value it is necessary to take both into consideration. It would be tedious to do so for each age period and civil condition, and I propose therefore in the following paragraphs to confine the detailed examination of the statistics to their most prominent characteristics, *viz*, the varying prevalence of marriage amongst children of both sexes below the age of 10 and the proportion of females who are widowed at the child-bearing ages, *i e.*, between 15 and 40.

Infant marriage by religion and locality.

728. In considering the question of infant marriage it must be remembered, as already explained,

Diagram showing the number per 1,000 aged 0—10 who are married (all religions)



that with the Hindus marriage is not necessarily, or even usually, at once followed by cohabitation. At the same time, in Bengal at least, this often takes place before the child-wife has reached the age of puberty, and, if not, it usually does so immediately after her first menstruation.

On the Malabar Coast, moreover, there are two ceremonies the *Tali*-tying or ceremonial marriage, which is merely a religious sacrament and is not followed by cohabitation, and the *Sambandham*, or practical

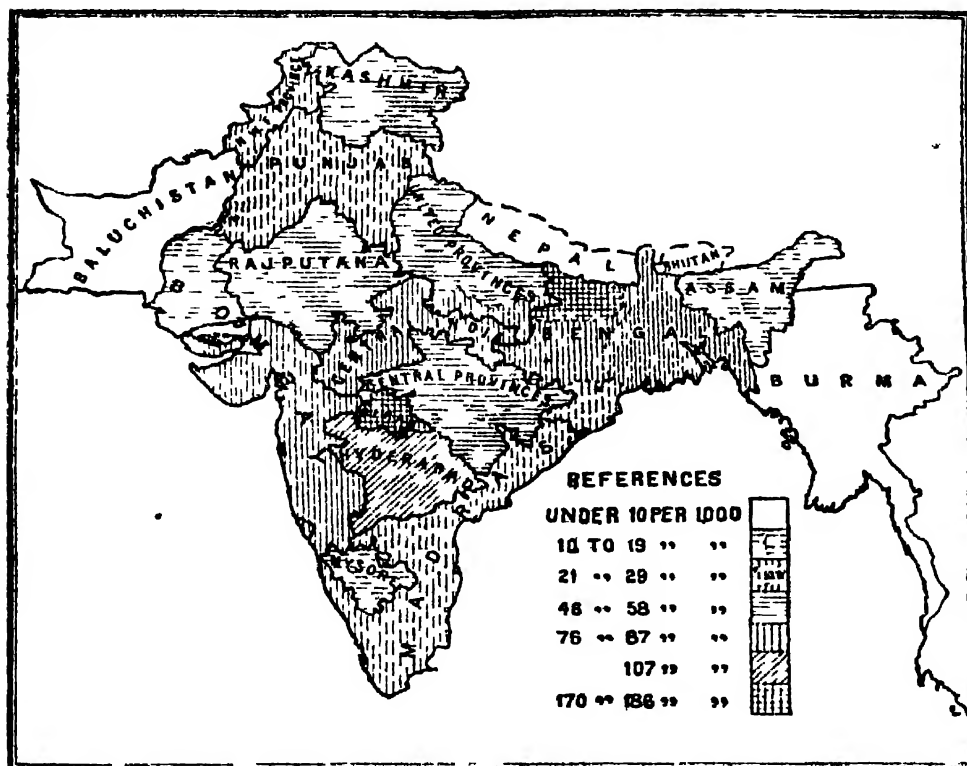
cal marriage, which is performed as a preliminary to real married life. The bridegroom at the religious marriage seldom becomes the real husband and it is not even necessary that he should be a member of the same caste. Here as elsewhere the enumerators were directed to accept without cavil each person's statement as to his civil condition, and it is not quite clear which ceremony was generally regarded as constituting marriage for the purpose of the census returns but it would seem usually to have been the *Sambandham* or practical marriage.

(1) Hindus

729. In India as a whole 22 boys and 58 girls aged 0—10 are married per thousand of each sex; for Hindus the corresponding proportions are 28 and 70 and for Muhammadans 10 and 39. In Assam, Burma, Mysore, Cochin and Travancore the number of Hindu males of this age who are married is 3 or less per mille, in Orissa, Madras and Coorg it does not exceed 5 and in Kashmir, Bengal proper and the Punjab 9, but everywhere else the proportion is far higher; it ranges from 21 to 27 in Rajputana, the Central Provinces, Hyderabad, Bombay, Berar and Ajmer, and rises to 32 in the United Provinces, and the Chota Nagpur plateau, 49 in Central India, 66 in Baroda and (the climax) 113 in Bihar. The prevalence of infant marriage amongst females follows the same general direction but on a higher plane, except in Burma, Coorg, Cochin and Travancore where it is almost as rare as it is amongst males, and in no case exceeds 3 per mille. The proportion gradually rises from 10 per mille in Mysore to 18 in Assam, 21 in Orissa, 27 in Madras and 29 in the Punjab; it lies between 46 and 61 in Kashmir, Rajputana, the Central Provinces and the United Provinces, between 76 and 83 in Bengal proper, Chota Nagpur and Bombay; it is 107 and 108, respectively, in Hyderabad and Baroda, 170 in Berar and, highest of all, 186 in Bihar, where in one district it reaches the phenomenal figure of 418 per mille. The above distribution will be more

clearly understood from an examination of the accompanying map in which

Map showing the number per 1,000 Hindu females aged 0—10 who are married.



NOTE.—In this map the four sub-provinces of Bengal have been hatched separately, also Sind in Bombay and the south eastern districts of the United Provinces. Native States in political relation with Local Governments have been amalgamated with them. Baroda has been treated as part of Bombay and Coorg of Madras.

Sind has been divided from the rest of Bombay and the four sub-provinces of Bengal and the areas of greatest and least prevalence in the United Provinces have been shaded. separately. The general result is that child marriage is least frequent in the extreme east of India, and in Baluchistan Sind and Mysore; it is not very common on the East Coast, nor in the Punjab and Frontier Province, but rapidly increases as one recedes from the Punjab southwards and westwards until, in Berar, it reaches a figure which is exceeded nowhere in India save only in an

isolated tract in the west of Bengal. The general causes tending to early marriage and the manner in which the practice first arose have already been discussed in the first Part of this Chapter. Of the local variations in the extent to which children are given in wedlock before the age of 10 I have no general explanation to offer, but the following remarks are extracted from my Report on the Bengal Census regarding the special prevalence of the practice in Bihar :—

“I have enquired regarding the causes of this state of affairs, but the result is not altogether conclusive. Every one agrees that infant marriage is extraordinarily prevalent, so much so, that amongst some of the lower castes, if a boy remain unmarried after about 10 or 12 years of age, he is believed to have some physical or mental defect, and this belief makes it very difficult for him afterwards to obtain a wife. But how the custom originated is a question less easily answered. Mr O'Donnell's conclusion was that the absence of the *parda* system amongst the lower castes makes it necessary to marry girls early to protect them from their own fancies, and the risk of infringing caste rules; but this explanation, though it has been put forward elsewhere also, seems insufficient, inasmuch as it does not account for the relative frequency of the practice in the particular tract under consideration. Amongst the people themselves, says Mr. J H Kerr, Settlement Officer, Darbhanga, the explanation ‘is generally discredited. Babu Romesh Chandra Dutt, Assistant Settlement Officer, says that he has conversed with many persons of the lower castes on the subject and that this explanation has never been put forward in defence of the system.

“The absence of any restriction on widow marriage has been assigned as one of the reasons why infant marriage takes place. This tends to early marriage in two ways. By increasing the supply, it makes wives cheaper, so that males can marry at an earlier age, while the fact that their daughters can marry again if widowed, inclines their parents to see them settled in life as soon as possible, whereas, where widow marriage is forbidden, the general sentiment is against marrying girls long before the age of puberty. But amongst all but the highest castes, widows are allowed to remarry all over Bihar and also in Orissa, and this can not, therefore, be an explanation of the special prevalence of infant marriage in and around Darbhanga. Neither can the desire to see children settled, nor the greater cheapness of infant marriage be held to explain the peculiarity. The only explanation which I have received that seems to account for it is that the area where infant marriage is most prevalent is under the influence of a special class of Brahmans, the Maithil or Tihutiá, and that they have exercised their influence in favour of the early celebration of a ceremony which is a source of profit to themselves. Why these particular Brahmans should have inculcated the practice more than others it is difficult to say, but several reporters agree in attributing it to their teaching. According to the *shástras* a boy cannot perform any religious ceremony

or offer the *pinda* until he has undergone the ceremony of *sanskār* or purification, which, in the case of the twice-born castes, takes place when they receive the thread, between the ages of 5 and 9. The Sudras, who do not wear the thread, consider marriage as their *sanskār*."

730. As compared with 1891, there is no change in the proportion of children of either sex who are married before the age of ten, but in both cases it is less than in 1881, the diminution being especially marked in the case of females. A period of ten years is too short a one to disclose any real and far-reaching change, and the proportions either in 1891 or at the present census may have been affected by temporary causes such as, in some parts, famine which discouraged marriage, or the occurrence of specially auspicious or inauspicious marriage seasons. The year 1897, for example, was held to be so inauspicious that in many parts no marriages were allowed to be performed, while in others they were permissible only in the month of Baisakh. It is thus difficult to say whether the absence of any alteration in the proportions since 1891 means that in India, as a whole, there has been no change in the attitude of the people towards infant marriage, but it is none the less satisfactory to notice that the last two enumerations agree in showing a marked improvement on the state of affairs disclosed in 1881. Turning to the variations by locality we find that in Bengal, Hyderabad, and the United Provinces an increase has occurred since 1891 in the proportion of married males, in Bengal and Hyderabad this proportion is still less than it was in 1881, but in the United Provinces the rise since that year has been continuous. The changes in Assam, the Central Provinces and Madras are slight, while in Berar, Bombay, the Punjab and Baroda there has been a sharp decline. In the case of females the variations are more marked. Excluding the minor units, Assam and the United Provinces have a higher proportion of child-wives than they had either in 1891 or in 1881, and in Bengal, though less than at the earlier enumeration, it is higher than it was ten years ago. The increase in the latter province has occurred in Bihar where infant marriage is most prevalent, and in Bengal proper there are fewer child-wives now than there were at the previous census. Elsewhere there has been a general decline in the prevalence of female infant marriage, the most noteworthy instance being that of the Baroda State where the proportion of married girls under 10 is alleged to have fallen from 171 and 173 at the two previous enumerations to 108 per mille at the present census. If genuine, the falling off is probably due chiefly to the famine of 1900.

(2) Muhammadans

731. We have already seen that amongst Muhammadans generally infant marriage is far less frequent than it is amongst Hindus. The same result is noticed if the comparison is made by provinces, save only in the Baroda State where, however, the total Muhammadan population is very small. Excluding Baroda, the only tracts where more than 30 per mille of the Muhammadan females aged 0—10 are married are Bengal (excluding Chota Nagpur), the Central Provinces, the United Provinces, the Central India Agency and Hyderabad; in these tracts the prevalence of the practice may safely be assigned to the large extent to which the Muhammadan community consists of converts from Hinduism, who have retained many of their old social customs. In Madras where the Mappillas of Malabar, who are also chiefly the descendants of converts, form the bulk of the Muhammadan population, only 7 females per thousand of this age period are married, or 3 less than in the Punjab, but on the Malabar coast no section of the population is addicted to infant marriage. As compared with previous enumerations very little change is to be noticed in the prevalence of infant marriage amongst males except in the Central Provinces, the United Provinces and Baroda where the figures indicate an extended resort to the practice. In the case of females, infant marriage seems to be steadily going out of vogue and the proportion of wives at the age '0—10' in India at large has fallen from 49 per mille in 1881 to 43 in 1891 and 39 at the present census. An upward tendency is apparent only in the three administrations where it has been noticed already in the case of males.

(3) Animists and Buddhists

732. The Animists very rarely give their children in wedlock before the age of 10, in Burma practically none below this age are married, in Assam the proportion is only 3 per mille, in Bengal and Madras 7 and in Rajputana 8; in the Central Provinces, however, 18 per mille are married and in Baroda and Central

India 24 and 43 per mille, respectively.* The Bhils and cognate tribes of this part of the country seem to have very little affinity in this respect to those living further east

Infant marriage of either sex is very rare amongst Buddhists, and in Burma, where the great majority are found, the custom is practically non-existent.

733. At the present day various factors are at work which influence the question of infant marriage. Amongst the uneducated and lower classes of Hindus, and especially those that allow their widows to marry again, the tendency seems to be, if anything, towards a more extended resort to the practice, but among the better classes a feeling is springing up against it—partly because the parents dislike exposing their daughters to the risk of a long period of widowhood and partly because of the influence of Western ideas which makes them feel the impropriety of imposing upon immature girls the duties of a wife and mother. The two most recent Hindu sects which appeal to the educated classes—the Brahmo Samāj in Bengal and the Arya Samāj in Upper India—lay great stress on the desirability of allowing girls to reach maturity as virgins. The Social Conference which holds its meetings annually in connection with the National Congress has made the abolition of child-marriage one of the leading planks in its platform, and it is aided in its propaganda by the difficulties, already referred to, which many of the higher castes at present experience in finding husbands for their girls. In British territory it has been made penal for a man to have intercourse with his wife before she is 12 years old. The Mysore Government has passed a Regulation forbidding the marriage of girls under eight altogether, and that of girls under fourteen with men over fifty years of age. The association of Rājputs and Chārans in Rājputana, known as the *Walter Krit Rājāputra Hitkarin Sabha*, of which mention has already been made, has fixed fourteen as the minimum age of marriage for girls and eighteen for boys, and the report for 1902 shows that, in that year, of 4,047 Rājput and Chāran marriages reported the above limits were infringed only in 147 cases †. A similar association has recently been established amongst the Rājputs of Malwa.

It is too soon to say what effect these and similar movements will have on the customs that at present prevail, but it may be conjectured that, so far as direct efforts at reform are concerned, it will be long before they influence, either directly or by the force of example, the great masses of the people, whose practice will continue to be governed rather by custom, hereditary sentiment, the injunctions of the local priesthood and other similar subtle forces which it is exceedingly difficult to measure or diagnose. In the case of Muhammadans infant marriage is regarded with disfavour amongst the educated classes, and even amongst the more ignorant sections of the community, with whom the practice is a relic of Hinduism, the influence of the Mullahs is helping to bring it into disrepute. On the other hand the Animistic tribes who, in the seclusion of their own homes in the forests or on the hills, favour adult marriage coupled with

* In Baroda the Animistic tribes have a curious practice of allowing a probationary period of cohabitation before the binding marriage ceremony is performed. Either party can annul the contract before the expiry of this period, but if the bridegroom should happen to die while it is still current, the girl has to go through a ceremony of marriage with his dead body.

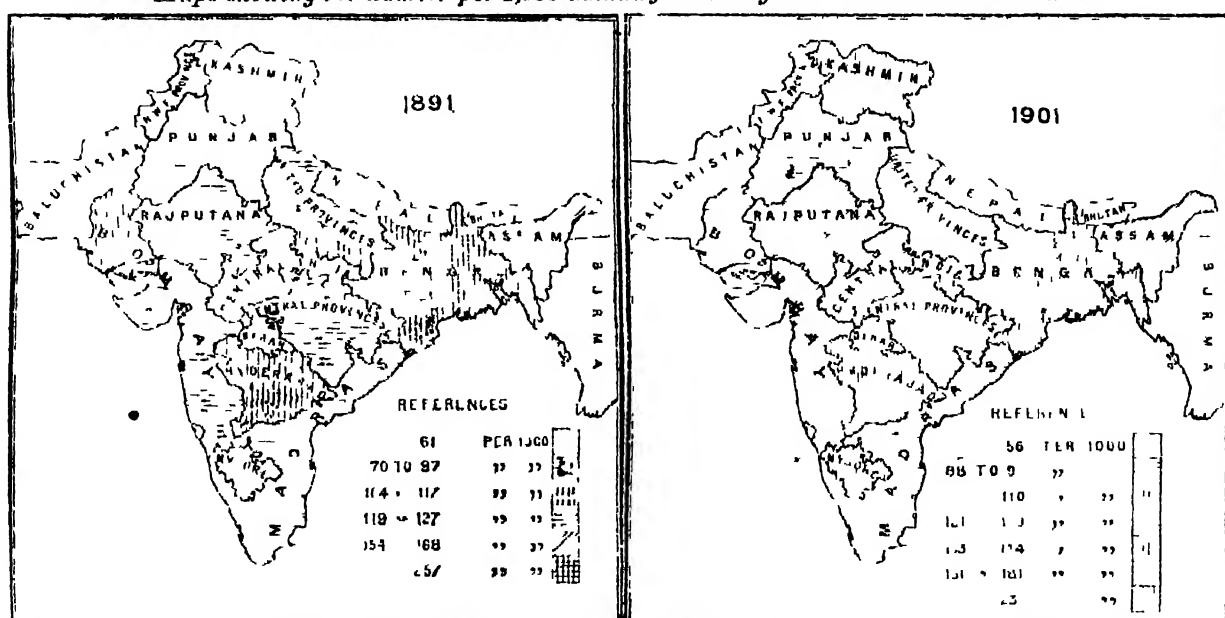
† In view of the novelty of the departure and the marked success with which it has already been attended, it seems desirable to give a brief account of this interesting movement. On various previous occasions attempts had been made in Rājputana to settle the question of marriage expenses with a view to suppress infanticide amongst the Rājputs, but they failed because no uniform rule was ever adopted for the whole of Rājputana. The present movement dates from 1888, when Colonel Walter, Agent to the Governor General, Rājputana, convened a general meeting of representatives of all Rājputana States to check these expenses, and a set of rules was unanimously drawn up. These rules laid down the maximum proportion of a man's income that might be expended on (a) his own or his eldest son's marriage and (b) that of other relatives, together with the size of the wedding party and the *Tyag*, or largess to Chārans, Bhāts, Dholis and others. [The scale of expenses for (a) is not more than two-thirds of the annual income up to Rs. 1,000 a year, not more than half of that between Rs. 1,000 and Rs. 10,000, not more than one-third of that between Rs. 10,000 and Rs. 20,000 and not more than a quarter of any income exceeding this amount, and for (b) one-tenth of the above. The *Tyag* is 9 per cent. of this limit in the case of (a) and 1 per cent. in that of (b), but no *Tyag* is in future to be paid by Thakurs with an income of less than Rs. 500 a year.] It was also laid down that no expenditure should be incurred on betrothals and the minimum age at marriage was fixed at eighteen for a boy and fourteen for a girl. It has since been ruled that no girl should remain unmarried after the age of twenty and that no second marriage should take place during the life-time of the first wife unless she has no offspring or is afflicted with an incurable disease. The maximum expenditure at funerals was also determined and a standing committee was appointed in each State to see that the regulations are properly carried out and to report half yearly to a general committee the result of the working of the rules. The above rules apply primarily to the Rājputs and Chārans, but other castes are encouraged to conform to them. The degree of success attained by the Sabha so far as the age at marriage is concerned has been mentioned in the text. It has been even more successful in other directions and only 18 cases were reported in 1902 in which the rule as to marriage expenses was infringed.

complete pre-marital sexual freedom within the limits of the tribe, the example of Hinduism is gradually leading them to discountenance this modified form of promiscuity and to substitute for it the Hindu system of early marriage

The Wi-
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locality
(1) Hindus

734. At the present enumeration, of every thousand Hindus of each sex aged 15—40, 47 males and 137 females were returned as widowed. These proportions, however, are abnormal, owing to the heavy mortality which occurred in the famine years, and it is necessary therefore to consider them in connection with those of the census of 1891 which was taken after a cycle of prosperity. On that occasion only 36 males and 123 females per mille were entered as widowed at the ages in question, while at the census of 1881, which also followed a period of famine, the proportions were 42 and 142, respectively. At the present time widowers are most common in Baroda, Rajputana (with Ajmer), and Central India, and then in Bombay, the Central Provinces and Berar. In Assam, the United Provinces, and the Punjab the proportion slightly exceeds the general average and in Hyderabad, Kashmir, and Travancore it is slightly below it. The deficiency becomes more marked in Bengal and still more so in Burma and Madras where it is respectively only 26 and 21 per mille. In the case of Baroda, the proportion of males who were widowed at this period of life in 1891 (37 per mille) was almost identical with that in India as a whole and the high figure at the present census (107 per mille) is, therefore, clearly due to the famine, which greatly increased the mortality and consequently the number of gaps in the family circle; the same circumstance accounts for the high proportions in Rajputana, Central India, the Central Provinces, and Bombay, and in the two last-mentioned provinces the proportion in 1891 was less than the mean for the whole of India. In the case of females the famine has had an equally disturbing effect on the proportions, as compared with 1891, but the local differences in respect of widow-marriage are so much greater than they are in the case of widowers that it has not succeeded to the same extent in obliterating the distinctions due to local usage. By far the highest proportion of widows in any part of India is found in Bengal proper which enjoyed practical immunity from famine: Baroda, which comes next, owes its position wholly to the famine and in 1891 its widows were only two-thirds as numerous as the general mean, but Assam which occupies the third place (or the second if the province of Bengal be treated as a single entity) was more free from famine than any other part of India. In Central India, Rajputana, and Bombay, which follow Assam, famine is in each case the main factor, and in 1891 the proportion of the widows in Bombay was much below that in India at large. It is unnecessary to discuss further the figures for the two enumerations which can be more readily comprehended from the sub-joined maps, which show for each province, and, in some cases, part of a province, the proportion of widows to the total female population at the time of life under consideration.—

Maps showing the number per 1,000 Hindu females aged 15—40 who are widowed



735 In considering the varying prevalence of widowhood at the reproductive ages, so far as it is due to social causes, it is better to look to the results of 1891 rather than to those of the present census. It will be seen from the map that according to the returns for 1891 widows are most common in Bengal proper and Assam, then follows Mysore, and then Madras, the Punjab, Bihar, Orissa, Chota Nagpur, and Hyderabad, in all of which tracts the prevalence of widowhood does not greatly differ from that shown for India as a whole. It is considerably less common in Bombay, the United Provinces, Berar, Baroda, and the Central Provinces and least so in Burma, Cochin, and Travancore. The return by civil condition for the Central India Agency and Rajputana in 1891 referred only to a limited area and cannot be taken as indicating the general proportions in these Agencies. At the same time, having regard to the severity of the famine in these tracts, it may be assumed that the proportion of widows at the present census is nearly double that which would obtain in normal times when there are probably not more widows there than in the United, and the Central, Provinces.

It will be noticed that there is no general relation between the tracts where widows of child-bearing age are most common and those where infant marriage is most freely resorted to. The latter custom is most widespread in Bihar where widows are far fewer than in Bengal proper, it is also very common in Berar where also widows freely remarry, on the other hand, widows are unusually numerous in Assam where infant marriage is seldom resorted to, and in Bengal proper where it is not specially common. The fact seems to be that, although both infant marriage and perpetual widowhood are inculcated by the Brahmans, the two observances are in some respects antagonistic. Where the local or caste rules forbid widows to remarry, parents are reluctant to give their daughters in wedlock at a very early age and so expose them to the danger of a long life of misery. Moreover, where the infant marriage of girls is most common, the males also marry younger* and so more often suffer bereavement than in tracts where girls marry later and their husbands are usually much older than they are. There is thus a large demand for second wives, but as parents feel some reluctance in giving their virgin daughters to widowers, and the supply would in any case be insufficient, it can only be met by allowing widows to marry again. Among certain artizan castes of Bihar a widow appears to be more prized than a virgin wife, owing to her skill in the industry by which her caste people gain their living.

It must be remembered that in addition to the influence of enforced widowhood and abnormal conditions, such as those of famine years, the proportion of widows depends on two factors, *viz.*, (1) the age at which girls are given in wedlock, and (2) the difference between the ages of husband and wife. It is clear that where this difference is small fewer women will become widows as a larger number of husbands will outlive their wives than in communities where they are much older and must therefore in the ordinary course of events predecease them†. The mean duration of widowhood depends on the mean age of widows at the time of their bereavement and, given an equal proportion of women who become widows in two different communities, the proportion of widows who are alive at any given time will vary according to the average number of years by which they outlive their husbands. It follows that, in communities which prohibit the remarriage of widows, the proportion of such persons will be largest where girls of tender age are married to men advanced in life, and smallest where they are given at a later period to husbands not much older than they are themselves.

736. At the present time there is on the one hand a tendency on the part of certain castes or sub-castes to endeavour to improve their social status by forbidding their widows to remarry, and on the other, there is the influence of Western ideas which, through the agency of the Social Conference and otherwise, is gradually bringing about a change of feeling amongst the upper classes, and in the large cities, where public opinion is most advanced, a few such marriages,

* Thus in Bihar where infant marriage is most common the married females under 10 outnumber the married males in the proportion of only 17 to 10 and those at 10—15 in the proportion of 15 to 10, but the corresponding proportions in Bengal proper, where infant marriage is much more rare, are respectively 87 and 76 to 10.

† So far as can be gathered from a rough computation (as described in the next chapter) the mean age of husbands in India at large appears to be 35·7 and that of wives 28·5 so that on the average husbands are about 7 years older than their wives. The difference is greatest in Madras, (9·6 years) and Bengal (8·5), in Bombay it is 6·8, in the Punjab 6·4, and in the United Provinces 5·2.

chiefly of virgin widows,* have taken place amongst Brāhmans and other high castes, but their total number is still very small and the future alone can shew how far the Hindu community as a body will follow the lead thus given to it. Owing to the disturbing influence of famine it is impossible to draw any general conclusions from the figures for the present census as to the changes which may be in progress, but it would seem that in Assam the prejudice against the remarriage of widows must still be gaining ground. In Bengal there has been a continuous decrease since 1881 in the proportion of widows at the child-bearing ages, which appears to be due to the more rapid growth of those sections of the community that allow their widows to remarry :—

“There are three possible explanations of this phenomenon; either widow marriage may be coming more into vogue, or the castes who permit the practice may be increasing more rapidly than those who forbid it, or it may be due to the postponement of marriage and the greater equality in the ages of husband and wife, so that fewer women outlive their husbands than was formerly the case. The first of these explanations may be at once dismissed. There is no reason for supposing that the castes who forbid their widows to marry again or who discourage the practice are losing their old prejudices. If anything the tendency is in the other direction. The second possible explanation, however, appears to apply to a considerable extent. The question whether a caste allows its widows to marry again or not is an important factor in determining

Group	Net Variation since 1881	
	Bengal proper	Bihar
I . . .	+ 7 6	+ 0 6
II . . .	— 3 7	+ 5 2
III . . .	+ 1 8	+ 8 8*
IV . . .	— 2 5	+ 9 5*
V . . .	+ 10 2*	+ 10 6*
VI . . .	+ 27 5*	+ 15 4*
VII . . .	+ 27 8*	.

its social position and the practice, therefore, follows generally the lines of division adopted in the scale of social precedence given in subsidiary table I at the end of the chapter on Caste. I have noted in the margin the net variation in the strength of each group of castes shown in this table and have marked with an asterisk the groups in which widow marriage is allowed by all or the majority of the castes contained in them. It will be seen in the chapter on Caste (paragraphs 622 to 662) that the variations are in some cases due to differences in the character of the original return or in the system of classification adopted in the course of compilation. But such changes cannot

be sufficiently numerous to affect the general result indicated by the comparison, which is that the lower castes, amongst whom widows are permitted to remarry, are increasing far more rapidly than those whose members disallow this practice. The third explanation, however, must also be given credit for a share in the result. Subsidiary table IV shows that at the present census only 115 gals per mille under 10 years of age were returned as married, compared with 133 in 1881.”

(2) Muham-
madans

737. The proportion of the widowed amongst Muhammadans at the ages under review is 34 males and 98 females per mille. The proportion for males has been almost stationary at the last three censuses, while that for females, which was 110 in 1881, shows a steady diminution. In 1891 there was a general decline in the proportion of widows in all provinces except Burma, where the Musalman population is small, Assam, and the Punjab, and it is probable that, but for the famine, this decline would have continued. It has actually done so in Bengal and Mysore; and Burma and the Punjab, which showed an increase at the last census, now return a smaller proportion than in 1881. In Madras, the United Provinces, Hyderabad and Bombay the ratio has increased during the last 10 years, but it is still smaller than in 1881, and the rise that has taken place is, except in Madras, so small compared with that which has been recorded in the case of Hindus, that it may be asserted with confidence that it is wholly due to the famine, and that there would otherwise have been a fall in the proportions. In Baroda and the Central Provinces alone has the relative growth of the number of widows amongst Muhammadans been at all commensurate with that recorded for Hindus. Of the areas which lie outside the famine zone, Assam is the only tract which discloses an increase in the number of Muhammadan widows at the child-bearing ages.

The local proportions for the widows are smallest, as might be expected, in Kashmir and the Punjab, where Hindu influences are weakest and (discounting the effect of famine) they increase steadily towards Assam and Bengal proper in the east and Mysore in the south. This is what one would

* Manu permitted the remarriage of virgin widows. The distinction between them and widows whose previous marriage has been consummated continues to be recognized in some parts even at the present day, and in Assam the odium which attaches to the remarriage of the latter does not exist in the case of the virgin widow, as local custom permits the supplementary marriage ceremony which precedes consummation to be performed by a second person if the one who went through the first ceremony is dead. All legal obstacles to the marriage of Hindu widows in British territory were removed by Act XV of 1856.

expect. The prejudice against the marriage of widows is in the main a Hindu idea, which affects most strongly those Muhammadans who are converts from that religion, and these, it may be presumed, are relatively most numerous in the tracts which are furthest from the Punjab. The decline at the present day which has been shown to be in progress is doubtless attributable to the preaching of the Mullahs, who are directing their efforts to the purging of their followers from this and similar survivals of Hindu superstitions and prejudices.

739. The Animistic tribes, like the Hindus, have had the ranks of their widows greatly swollen by the casualties of the famine years which have sent up their proportion to the total population at the ages '15—40' from 62 to 141 per mille in the Central Provinces and from 43 to 104 in Baroda. There is no record of the civil condition in 1891 of the Animists of the Central India and Rajputana Agencies, but there can be no doubt that here also it would in normal times fall to less than half the high ratio of 1 in 6 recorded at the present census which exceeds that returned by the Hindus of the same area. The slight rise recorded in Bengal and Madras may also be ascribed to a higher rate of mortality, but that in Assam can only be due to the tendency of the local tribes to follow the example of their Hindu neighbours; in that Province Animistic widows remarry less freely than in any other part of India. The practice is less popular in Bengal than in Burma and the Central Provinces, and is most so in Madras and Baroda. (8) Animists and Buddhists

In the case of Buddhists, in Upper Burma 7 per cent of the females aged 15 to 40 are widowed, compared with only 5 per cent. in Lower Burma. A similar difference was noticed also in 1891 when Mr. Eales was inclined to attribute it to violent deaths in Upper Burma amongst the males in the disturbances which followed the annexation. The corresponding proportion amongst the Buddhists of South-East Bengal is higher than that in Upper Burma, but amongst those of North Bengal, who are of Tibetan and Nepalese origin, widows remarry with the greatest ease, and the number of females who are returned under this category at the child-bearing ages was very small.

739 The rules which in theory govern the practice of polygamy are well known, but in practice, except amongst wealthy Muhammadans, a second wife is very rarely taken unless the first one is barren or suffers from some incurable disease; even then, in the case of Hindus, a man has frequently to obtain the consent of his caste *panchayat* and occasionally that of his first spouse also. In the Empire as a whole, amongst all religions taken together, to every 1,000 husbands there are only 1,011 wives, so that, even if no husbands have more than two wives, only 11 per 1,000 indulge in a second helpmate*. The excess of wives is greatest (31 per mille) amongst Animists, and next greatest amongst Musalmáns (21 per mille); in the case of Hindus and Buddhists it is only 8 and 7 per mille respectively, whilst amongst Christians who are, of course, strict monogamists, and of whom many are foreigners, the excess is on the side of the husbands. As regards locality, polygamy appears to be more common in Madras than in any other large province, but it must be remembered that there is extensive emigration from this Presidency to Ceylon, Burma and elsewhere, and that amongst these absentees, males, and therefore husbands, are in very marked excess. Migration also accounts for the apparent excess of wives over husbands in Bihar, and for the deficiency of married women amongst the Hindus and Musalmáns of Burma, the Musalmáns of Bombay, and the Hindus of Bengal proper. Polygamy

740. India contains examples of both the recognized types of polyandry: the matriarchal, where a woman forms alliances with two or more men who are not necessarily related to each other, and succession is therefore traced through the female, and the fraternal, where she becomes the wife of several brothers. The former, at the present day, is confined to the Todas of the Nilgiris, and the Náyers and other castes on the Malabar coast, but even there it is falling into disrepute and desuetude and, where it exists, is gradually taking the fraternal form.† The Travancore reporter says that at the present day the respectable classes are strictly monogamous, and that even the right of divorce Polyandry

* There is a possibility that some of the widows who have taken a second husband have been shown as 'widows' where they ought to have been entered as married, but, as stated in paragraph 721 above, this does not seem to have happened to any appreciable extent.

† The following Census Reports contain interesting information regarding Polyandry in Southern India:—Madras Report of 1891, page 226, Travancore Report of 1901, page 330 and Cochin Report of 1901, page 159.

is very sparingly exercised. In Madras, on the other hand, in 1891, Mr. Stuart laid special stress on the great facilities for divorce which exist in some parts of that Presidency. The fact that inheritance is traced through the female is, in any case, a clear evidence of the general prevalence of the system in earlier times. It was also probably widespread amongst many tribes in other parts of India, who at the present day retain no tradition of the practice, *e.g.*, amongst the Khásis and Gáros of Assam, who still adhere to the system of succession through the female, the Doms, Háris, Pásis, and Bihar Tántis, etc., with whom the sister's son still acts as priest, and the Kalus, whose matrimonial arrangements are conducted by the maternal uncles of the parties.

The other, or fraternal, form of polyandry is still more or less common along the whole of the Himalayan area from Kashmir to the eastern extremity of Assam. It exists as a recognized institution chiefly in the case of people of Tibetan affinities, such as the inhabitants of Ladakh in Kashmir, of Lahul and Spiti in the Punjab, the hill pargana of Jaunsár Báwar in the Dehra Dun district of the United Provinces, and Sikkim and Darjeeling in Bengal.* In Kashmir the woman is apparently regarded as the wife of all the brothers, and the children call them all 'father.' In the Punjab the practice is more uncertain; according to one account it is the same as in Kashmir, while according to another the first-born is regarded as the son of the eldest brother, the second-born of the next, and so on; elsewhere again it is said that the mother is allowed to name the father of each child, or, lastly that the eldest brother alone occupies that position. In Sikkim and the neighbourhood it is stated in the Bengal Report that:—

"The children belong to the same exogamous clan as the male parent, and the property descends through the male, and not through the female, as in the case of matriarchal polyandry, *i.e.*, where a woman marries several men who are not related to each other. When a woman marries a man, she is regarded as the wife of the *de jure* husband and also of his younger brothers or (in rare cases) cousins, but it does not necessarily follow that she cohabits with all of them. In this matter the choice rests with the lady, and in any case she is visited by the younger brothers only when the man who actually married her is away from the house. He stands on quite a different footing from the others, and the children call him father and his brothers uncle. If one of the younger brothers marries, he ceases to have any claim on his elder brother's wife, but leaves the family abode and sets up a new house of his own, being given at the time of departure his share of the family property. Brothers who are younger than he is, can, with his permission, join him and share his wife, or they can remain in the old home.

"The origin of polyandry amongst the Bhotias is attributed by Mr Earle to the poverty of the country and the desire to prevent the division of property. There is no very marked dearth of females, and the superfluous women usually become nuns or prostitutes. Polygamy prevails as well as polyandry, but only amongst the rich. In their case each wife is kept apart in a house of her own. Large families are desired by men and women alike, as the greater the number of children, the more can be dedicated to a religious life."

741. The system as thus described seems to indicate a gradual transition from fraternal polyandry to monandry and does not differ very greatly from that in vogue amongst the Santáls who are not regarded as polyandrous. With them, although there is no question as to a man's sole claim to be regarded as the husband of the woman he has married, and as the father of her children, an extraordinary amount of familiarity is allowed between the latter and her husband's younger brothers. They have no actual claim on her, but if she is complacent there is no check on their intercourse with her, provided that their familiarities are not flaunted too publicly. The *de facto* husband has the right to object, but he would be regarded as churlish if he did so, and he, on his side, is permitted the same indulgences with his wife's unmarried younger sisters. According to Mr. Rose a similar system of sharing the elder brother's wife is practised, more or less openly, by the lower castes throughout the Himalayan area and also, though the custom is not admitted, by the Játs of the plains; in the Kanawar State it is, he says, not uncommon even amongst the Bráhmans.

* Faint traces of an older matriarchal system are perhaps discernible. In Darjeeling, where several men not related sometimes club together to take a joint wife, the custom is said to be recent and irregular, but a similar arrangement is reported by Mr. Rose to be not altogether unknown in the Punjab. He mentions a case within his own experience, in Spiti, where two men not related took a common wife, made their land joint, and "became brothers," and says that in Kanawar step-brothers or cousins may marry one wife and, in rare cases, men not related may become *dharm bhais* or ritual brothers and take a joint wife.

In Kulu a man may marry the daughter of his maternal or paternal uncle, or of his paternal aunt, but not of his maternal aunt, who alone is related to him solely through females; this is doubtless, either a survival of matriarchal polyandry, as pointed out by Sir Denzil Ibbetson in 1881, or, possibly, of a system under which all the brothers of one family married all the sisters of another, of which traces are discernible in the marriage customs of the Santáls as described in the next paragraph.

The ramifications of this custom at the present day are probably much wider than one would suppose from the facts which have as yet been brought to light, and it is doubtless a consequence of it that the lower castes in almost all parts of India regard a man's widow as the lawful property of his next younger brother, and that, when he takes her to wife, the usual ceremony, simple as it always is where widows are concerned, is often almost wholly dispensed with*. Possibly the rule which obtains amongst the Nambudri Bráhmans of allowing only the eldest son to marry within the caste is a similar survival of a system of fraternal polyandry.

The census unfortunately throws no light on this subject the areas where polyandry exists are very limited and the figures even for these areas are obscured by migration.

742 The conditions on which caste marriage-customs hinge vary so greatly with locality that it is impossible within the limits of this report to give a full review of the statistics. It must suffice to draw attention to one or two of the leading features which have been elicited, leaving the details to be ascertained by referring to the various provincial reports. The general conclusions for the United Provinces have been thus summarised by Mr. Burn —

- "(1) If a caste is found in all parts of the Provinces marriage is earlier in the east than in the west.
- "(2) Castes of medium or low position, which have a considerable admixture of Aryan blood, tend to favour child marriage as much as, and in some cases more than, the higher castes
- "(3) Castes which have fairly recently become Hindus have not yet adopted so strictly the rule of child marriage"

These conclusions are of general application in all, or almost all, parts of India, but the second might be amplified by the omission of the condition as to origin, and the third requires to be qualified with the remark that amongst certain forest tribes of Western India, such as the Bhils, infant marriage seems to be almost as common as it is amongst Hindus, and it is doubtless so also amongst recent converts from the ranks of such tribes. The differences which exist in different localities in respect of the age at marriage to which Mr Burn alludes are found everywhere, in this respect, the main line of cleavage seems to be local rather than personal. The local variations which occur in the marriage customs of the same caste even within the

Caste	NUMBER PER 1000 GIRLS AGED 5-12, WHO ARE MARRIED IN		
	Bengal	Bihar	Orissa
Ahir and Goala	362	414	70
Bráhmán	191	180	224
Chamar	208	609†	74
Dhoba	198	373	74
Hajam and Napit	250	590	
Kamar and Lohar	277	493†	102
Kumhar	273	675†	94
Tanti and Tatwa	323	605†	109
Teli	397	626†	148

† These proportions refer to Muzaffarpur and Darbhanga and the whole of Bihar

consummation follows immediately as in Europe.

743 In the same province it was shown in 1891 that there are no less than fifteen castes who resort to infant marriage more freely than do the Bráhmans, and the Kalingi and Velama castes, which then headed the list, are of a pronounced Dravidian type and take rank socially in Group IV—Clean Sudras. In Bombay the aboriginal or semi-Hinduized Bhils, Mahars, Berads and Kohls give their

* In most parts of India the rule is strict that a widow may (or must) marry her late husband's younger brother, but not his elder one. The prohibition against marrying the latter is, however, apparently not absolute in the Punjab where so many exceptions are found to the Hindu usages in vogue elsewhere, e.g., greater freedom in the matter of intermarriage (Khatri will marry Arora women), commensality (Jats, Aroras, Gujars and Ahirs will eat and smoke together), the rareness of infant marriage and greater frequency of widow marriage, and the absence of the elaborate ideas regarding ceremonial pollution which prevail in the south of India.

Query—Is this a result of the association of Hindus with Muhammadans in the Punjab which has weakened old scruples, or is it due to the fact that these and similar customs and restrictions developed further south where the Aryans came in contact with the Dravidians?

† Madras Census Report for 1891, paragraph 210.

daughters in wedlock earlier than do the Bráhmans, and Mr. Enthoven concludes that "among the tribes and castes in the lower ranks of the social scale, the practice of infant marriage of daughters is far more common than is generally supposed to be the case." This finding is confirmed by the figures for Baroda, where the proportion of married females amongst Gujaráti Bráhmans (249 per mille) is exceeded in the case of 22 out of 38 castes ranking below Kshattriyas and Vaisyas, and is more than doubled in the case of the Kachhuas (565 per mille), while the Maharáshtra Bráhmans, with only 159 girls per mille who are married at the age in question, stand almost at the bottom of the list. Amongst all the Vania castes taken together the proportion is 185 per mille, and amongst the two sections of the Kshattriyas it is 357 and 151 respectively. It will be seen from the latter portion of the following extract from the present Bengal Census Report that the same conditions prevail also in that province, where an attempt has been made to connect the variations in the age at marriage with the expenditure which it involves —

"We have seen that the amount of the consideration for marriage, and the person who pays it, vary according to several circumstances of which the relative demand and supply are the most important. The bride-price is highest where widow remarriage is forbidden, and wives are consequently scarce, and the bridegroom-price, where considerations of hypergamy or of other qualifications, such as some educational degree, are regarded as of importance

"In the same way it seems to me that the age at marriage is largely influenced by the expense which marriage involves. As a rule, where the cost of procuring a wife is great, men are perforce compelled to wait until they have saved enough money to procure one, and we have seen that Bráhman cooks are occasionally obliged to live and die unmarried through want of means to obtain a wife. When a man is comparatively old at the time of his marriage, he is unwilling to wait long until his wife can take her place as a real helpmate, and there is also a prejudice against excessive difference in the ages of husband and wife, not only on religious grounds but also because a father does not like to give his daughter to a man who, in the natural order of events, will leave her a widow while still in the prime of life. This feeling is especially strong in those parts of the province where widows are not allowed to marry again. Similarly, when a bridegroom has to be paid a high price, the father of several daughters is often unable to find the money until they are comparatively old, and where there is no social penalty, he will frequently allow them to arrive at puberty while still unwed. This view is fully borne out by the statistics of marriage by caste. The castes of Bihar amongst whom the bridegroom, or his father, is usually the recipient of a substantial *pan* or *tilak*, are the Brahman, Babhan, Rajputs and Káyasths, and it will be seen from subsidiary table V that the girls of these castes are married much later than those of the Chamái, Dhánuk, Dhobá, Kurmi, Musahar and other low castes, where marriage costs very little to either party. In Orissa the Karan, Khatri and Khandait castes marry their daughters very much later than the Chásá, Gaura and other lower castes.

"Amongst the higher castes, at least in Bengal proper, other motives also affect the age of marriage. It is thought that early marriage interferes with a boy's studies, and many consider it desirable that he should be in a position to earn his own living and to support a wife before he is allowed to marry. Others again, who are not well off, endeavour to marry a boy while he is still young, so that the bride's father may help in defraying the cost of his education. Moreover, as it is difficult to contract a suitable alliance for a boy who has no educational qualifications at all, the father of a stupid lad will endeavour to settle him in life before he is old enough for his want of intelligence to be noticed by others."

The circumstance that it is, generally speaking, the lowest Hindu castes who most freely resort to infant marriage may also lend support to the view, already referred to, that the practice has been resorted to in order to stop the system of pre-marital communism which was doubtless in vogue amongst these low castes prior to their conversion to Hinduism, just as it still is amongst the unconverted Mundas, Oráons, Hos and other tribes of the Chota Nagpur plateau.

Widow
marriage

744. As pointed out by Mr. Enthoven "the extent to which widow remarriage is allowed is ordinarily a better test of the social position held by a caste than that of infant marriage." The prohibition of widow marriage is an ordinance of undoubted Hindu origin; generally speaking, the rule is most fully observed by the higher castes, and in many parts of the country its observance is held to confer a badge of respectability on the community concerned. The degree to which the rule has penetrated the various social strata differs greatly in different parts. In Bihar and Orissa it has barely broken through the top crust of the twice-born castes, whereas in Bengal proper it has burrowed down to the bed rock, so to speak, of the impure castes. Sometimes, again, the cleavage is in a different direction, e.g., in the Punjab, where, says Mr. Rose, "widow remarriage is not a question of caste but of status within the caste." Thus Játs almost always

allow widow remarriage, but families of high social standing and, locally, certain tribes disallow it. Some Ahir families also disallow it. On the other hand Bráhmans in certain localities practise it, and so do the lower grades of Khatris. Elsewhere also, it occasionally happens that a particular sub-caste, *e. g.*, the Chánáur sub-caste of Kurmi, stands alone in adopting the rule of enforced widowhood. In Bengal, but not apparently in Madras, this often leads eventually to a complete severance and the members of the reformed sub-caste, when freed from the trammels of their connection with their unregenerate congeners, at once rise in social estimation and take rank amongst the other castes who forbid widow marriage. In the statistics of marriage by caste it will be noticed that the castes that allow their widows to take a second husband invariably have a comparatively small proportion of widows, while the Brahmins and other twice-born castes have a large one, though not necessarily the largest, as amongst the castes that follow this observance the proportion of widows will vary, as we have already seen, according to the relative ages of husband and wife and the age at which girls are usually given in wedlock.*

745. In the case of Muhammadans the only point of general interest in the present connection is the circumstance that the functional groups, such as Jolahá and Dhuniá, which partake most thoroughly in respect of endogamy and general social organization of the character of Hindu castes and consist mainly of converts from Hinduism, are much more prone to the practices of infant marriage and compulsory widowhood than are the better classes of foreign origin and than the converts who call themselves Shekh and live by cultivation

Marriage
customs of
Muhammad-
an races and
castes

Distribution by Civil Condition and Age of

PROVINCE, STATE OR AGENCY	CIVIL CONDITION OF 1,000 MALES														
	At all ages			0-10			10-15			15-40			40 and over		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
INDIA.	192	454	54	258	6	.	109	17	1	115	267	17	10	164	36
Ajmer-Merwara	151	464	82	171	4		116	19	3	150	291	36	17	150	43
Assam	551	399	47	293	1		110	3		145	243	19	6	152	28
Bengal	477	482	11	274	7		104	18	1	94	289	13	5	168	27
Bengal Proper	508	456	36	283	2		113	8		107	260	11	5	166	25
Bihar	404	545	51	253	27	1	80	43	2	65	306	17	6	169	31
Orissa	516	450	34	269	1		122	7		122	270	8	3	179	26
Chota Nagpur	507	458	35	301	8		118	24	1	83	279	12	5	147	22
Punjab	396	540	64	220	6		101	29	2	69	325	24	6	180	38
Bombay	479	457	61	250	6	1	112	19	1	108	281	25	9	151	37
Sind	570	376	54	286	2		99	17	...	164	221	19	24	140	35
Rest of Bombay	465	470	65	244	6		114	20	2	100	251	26	7	153	37
Burma	565	393	42	258	.	.	108	1		180	228	12	19	164	30
Central Provinces	467	472	61	283	7		109	22	1	90	294	26	5	149	34
Cooch	555	396	49	207	1	...	117	1	..	225	259	22	6	135	27
Madras	552	409	39	276	1	..	125	4	.	145	217	9	6	187	30
N.-W. F. Province & Punjab	531	407	62	261	1		112	10	..	142	234	17	16	162	45
United Provinces	450	484	66	245	7	...	95	30	1	95	287	20	15	160	45
Baroda State	419	483	98	206	14	2	99	33	3	102	307	47	12	129	46
Central India Agency	443	470	87	211	10	1	97	28	2	119	291	37	16	141	47
Cochin State	579	393	38	275	.	.	132	1	..	166	234	10	6	148	28
Hyderabad State	459	489	52	242	7	1	112	17	1	95	283	16	10	182	34
Kashmir State	534	420	46	28.	2	...	113	9		127	286	13	13	173	33
Mysore State	555	393	52	270	..	...	130	3		147	208	11	8	182	41
Rajputana Agency	479	432	89	203	4	1	114	7	2	143	261	37	19	150	49
Travancore State	525	429	46	256	...	..	121	2	...	145	258	15	3	169	31

TABLE I.

1,000 of each sex by Provinces and States.

PROVINCE, STATE OR AGENCY	CIVIL CONDITION OF 1,000 FEMALES														
	At all ages			0-10			10-15			15-40			40 and over		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
1.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
INDIA.	344	476	180	256	16	1	60	46	2	25	327	50	3	87	125
Ajmer-Merwara . . .	276	516	208	169	11	1	76	45	3	28	377	60	3	83	144
Assam	411	413	176	309	5	1	67	28	1	33	323	65	2	57	109
Bengal	318	483	199	264	27	1	41	58	3	12	329	60	1	69	135
Bengal Proper . . .	324	462	214	281	19	1	35	62	3	7	329	69	1	52	111
Bihar	278	534	188	227	45	2	36	60	3	13	335	52	2	94	131
Orissa	364	450	186	264	5	..	76	34	1	23	331	43	1	80	112
Chota Nagpur . . .	394	458	118	296	20	1	66	47	2	29	315	43	3	76	102
Berar	254	556	190	207	37	1	36	79	4	10	361	51	1	79	134
Bombay	330	485	185	247	19	1	58	53	3	22	332	58	3	81	123
Strat	430	438	132	305	5	...	70	23	1	47	307	36	8	103	95
Rest of Bombay . .	316	493	192	238	21	1	57	57	4	15	335	60	3	79	127
Burma	510	381	109	272	...	...	103	1	...	119	262	25	16	118	84
Central Provinces . .	319	476	175	254	14	1	68	42	2	25	333	54	2	87	118
Coorg	446	378	176	261	1	...	120	9	...	64	317	66	1	51	110
Madras	350	419	191	270	7	...	87	27	1	30	305	50	3	80	140
N-W F Province & Punjab .	376	488	136	271	5	...	78	29	...	26	343	28	1	111	108
United Provinces . .	308	522	170	242	15	1	48	58	1	15	346	39	3	103	129
Baroda State	281	520	199	205	23	2	57	58	4	18	345	77	1	94	116
Central India Agency . .	307	492	201	200	17	1	51	48	3	51	326	72	5	101	125
Cochin State	456	387	157	274	...	...	113	10	...	66	306	41	3	71	116
Hyderabad State . . .	312	499	189	228	25	1	45	63	4	33	326	54	6	85	130
Kashmir State	395	485	120	297	8	...	72	38	1	25	330	29	1	109	90
Mysore State	393	413	194	276	8	...	88	28	1	26	286	50	3	96	143
Rajputana Agency . . .	303	499	198	206	12	1	71	44	3	25	339	65	1	104	129
Trivancore State . . .	436	423	141	270	1	...	103	10	...	60	329	37	3	83	104

SUBSIDIARY

Distribution by Civil Condition

AGE	UNMARRIED			MARRIED			WIDOWED		
	1901	1891	1881	1901	1891	1881	1901	1891	1881
	2.	3.	4.	5.	6.	7.	8.	9.	10.
All religions									
Male	492	487	484	454	465	467	54	48	49
0-5	993	994	975	7	6	24	2	2	1
5-10	962	962	843	36	36	152	6	5	5
10-15	860	841	617	334	368	369	16	11	11
15-20	650	621	262	686	715	703	39	30	35
20-30	275	255	78	847	868	863	66	57	59
30-40	87	75	41	816	837	838	135	125	121
40-60	49	38	32	669	687	693	292	285	275
60 and over	39	28							
Female	344	339	323	476	485	490	180	176	187
0-5	986	986	923	13	13	75	1	1	2
5-10	893	874	481	102	128	500	5	3	19
10-15	559	491	122	423	495	834	18	11	41
15-20	179	132	22	777	833	832	44	35	96
20-30	40	26	11	868	863	764	92	81	225
30-40	21	13	7	765	779	476	214	208	517
40-60	13	10	5	484	477	476	503	513	816
60 and over	12	8		163	143	149	825	849	
Hindus									
Male	475	472	470	466	478	478	59	50	52
0-5	992	993	969	8	7	30	2	2	1
5-10	952	953	818	46	45	176	7	6	6
10-15	833	811	589	160	183	395	18	12	16
15-20	613	587	251	369	401	712	42	30	37
20-30	260	245	78	693	725	859	70	58	63
30-40	87	77	41	843	866	859	141	129	129
40-60	51	40	33	805	831	830	141	129	129
60 and over	40	29		654	675	679	306	296	288
Female	321	319	307	485	495	496	194	186	197
0-5	983	983	910	16	16	87	1	1	3
5-10	872	850	446	122	146	533	6	4	21
10-15	511	412	101	468	512	819	21	16	50
15-20	141	100	19	810	863	877	49	38	104
20-30	32	19	10	867	895	877	101	86	139
30-40	20	12	7	751	772	751	229	216	531
40-60	11	9	5	467	468	462	522	523	855
60 and over	8	6		150	183	140	842	861	
Buddhists									
Male	570	567	588	387	384	374	43	49	38
0-5	1,000	1,000	1,000						
5-10	1,000	1,000	998	5	1	2			3
10-15	995	999	939	69	57	58	3	5	30
15-20	928	938	424	570	575	546	27	34	52
20-30	403	387	120	824	842	828	48	62	95
30-40	128	96	52	824	845	853	97	109	245
40-60	79	46	34	652	679	721	268	280	
60 and over	80	41							
Female	509	505	518	380	377	388	111	118	94
0-5	1,000	1,000	1,000						1
5-10	1,000	1,000	989	13	6	10	1		20
10-15	986	994	675	262	240	305	15	22	56
15-20	723	738	138	730	742	806	57	72	60
20-30	213	186	29	810	827	881	104	119	252
30-40	86	54	18	655	687	750	278	278	680
40-60	67	35	20	281	301	300	636	662	
60 and over	83	37							

TABLE II.
of 1,000 of each main Age Period by Religions.

Age	UNMARRIED			MARRIED			WIDOWED		
	1901	1901	1901	1901	1901	1901	1901	1901	1901
	1	2	3	4	5	6	7	8	9
Muslimans									
Male	526	519	515	432	440	445	42	41	40
0-5	997	997	990	3	3	10	1	1	1
5-10	982	983	907	17	16	90	3	3	3
10-15	914	904	684	83	93	308	10	10	10
15-20	714	674	679	276	316	691	31	29	28
20-30	290	257	280	679	714	878	53	52	48
30-40	77	62	74	870	886	866	106	110	99
40-60	38	28	35	856	862	866	254	249	240
60 and over	29	20	27	717	731	733			
Female	376	365	350	471	475	480	153	160	170
0-5	992	992	919	7	7	49	1	1	2
5-10	927	914	517	70	83	470	3	12	13
10-15	597	514	120	391	474	819	31	29	31
15-20	161	104	22	808	867	902	69	69	76
20-30	33	20	8	898	911	784	182	203	201
30-40	17	11	11	801	786	490	483	529	502
40-60	12	9	8	505	462	159	815	550	834
60 and over	10	8	7	175	142				
Christians									
Male	574	570	599	391	399	371	35	31	30
0-5	998	997	997	2	2	3	1	1	1
5-10	994	994	986	5	5	14	2	1	2
10-15	972	979	898	26	20	100	4	3	13
15-20	841	810	570	155	157	417	17	10	36
20-30	465	490	175	518	500	789	42	31	91
30-40	105	104	49	853	865	869	100	90	240
40-60	39	40	707	861	870	731	267	262	
60 and over	26	26	23	707	712				
Female	465	456	450	409	420	398	126	124	152
0-5	997	997	992	3	3	7	1	1	1
5-10	984	987	900	15	12	97	7	2	3
10-15	885	882	554	108	116	559	18	11	17
15-20	423	398	81	554	591	816	53	15	70
20-30	92	89	30	855	863	769	153	143	201
30-40	38	40	17	809	817	432	428	424	501
40-60	26	31	174	516	545	146	804	795	841
60 and over	22	25	13	174	180				
Animists.									
Male	537	552	536	413	414	435	50	34	29
0-5	995	996	990	5	4	10	1	1	1
5-10	980	990	919	19	9	79	5	2	2
10-15	917	944	681	78	64	330	20	9	9
15-20	719	710	653	261	281	719	53	27	25
20-30	294	279	226	653	697	916	77	18	39
30-40	71	61	45	852	891	903	132	90	79
40-60	31	21	18	827	889	788	235	215	199
60 and over	24	13	13	741	772				
Female	442	467	445	419	422	447	139	111	108
0-5	992	995	981	7	5	18	1	2	1
5-10	968	976	767	29	22	227	12	6	6
10-15	805	805	281	183	189	698	44	22	21
15-20	389	367	49	567	611	906	91	51	45
20-30	91	77	16	818	872	867	186	123	117
30-40	30	24	10	784	853	625	435	363	365
40-60	21	16	9	514	621	239	737	747	752
60 and over	13	12		217	211				

SUBSIDIARY

Distribution by Civil Condition of 1,000

AGE PERIOD	MALE			FEMALE		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed
1	2	3	4	5	6	7
INDIA.						
0—5	993	7	...	986	13	1
5—10	964	36	2	893	102	5
10—15	860	134	6	559	423	18
15—20	650	334	16	179	777	44
20—30	275	686	39	40	868	92
30—40	87	847	66	21	765	214
40—60	49	816	135	13	184	503
60 and over	39	669	292	12	163	825
BENGAL.						
0—5	990	10	2	976	22	2
5—10	941	57	2	836	156	8
10—15	837	158	5	402	572	26
15—20	608	380	12	77	868	55
20—40	135	828	37	16	808	176
40—60	26	868	106	7	415	578
60 and over	21	739	240	5	130	865
BENGAL PROPER.						
0—5	997	3	1	990	9	1
5—10	988	11	1	878	116	6
10—15	933	65	2	349	624	27
15—20	704	289	7	39	898	63
20—40	150	818	32	10	784	206
40—60	25	875	100	5	333	662
60 and over	19	751	230	4	88	908
BIHAR.						
0—5	972	27	1	943	53	4
5—10	838	157	5	716	270	14
10—15	641	346	13	362	607	31
15—20	401	574	25	88	863	49
20—40	102	848	50	18	834	148
40—60	80	851	119	11	506	483
60 and over	24	719	257	6	158	809
BOMBAY.						
0—5	989	10	1	981	18	1
5—10	965	32	3	876	117	7
10—15	848	142	10	507	463	30
15—20	616	359	25	154	788	58
20—40	160	762	69	27	813	160
40—60	44	80	156	16	463	521
60 and over	38	639	323	14	151	835
BURMA.						
0—5	1,000	..	...	1,000	...	...
5—10	1,000	..	...	1,000	...	...
10—15	945	5	..	987	13	...
15—20	923	75	3	720	265	15
20—40	298	666	36	160	764	76
40—60	88	814	98	68	653	279
60 and over	83	654	265	83	282	635

TABLE III.

persons of each main Age Period for main provinces.

AGE PERIOD	MALE			FEMALE		
	Unmarried	Married.	Widowed.	Unmarried.	Married	Widowed
1	2	3	4	5	6	7
CENTRAL PROVINCES.						
0—5 . . .	994	6	...	990	9	1
5—10 . . .	956	42	2	901	92	4
10—15 . . .	824	168	8	610	374	16
15—20 . . .	561	415	24	203	744	53
20—40 . . .	131	796	73	27	823	150
40—60 . . .	26	819	155	9	496	495
60 and over . . .	19	689	292	7	171	822
MADRAS.						
0—5 . . .	998	2	..	994	6	...
5—10 . . .	993	7	...	955	44	1
10—15 . . .	967	32	1	759	233	8
15—20 . . .	867	130	3	286	681	33
20—40 . . .	255	716	30	28	820	152
40—60 . . .	30	872	98	12	451	537
60 and over . . .	18	733	249	9	113	878
PUNJAB.						
0—5 . . .	999	1	.	999	1	...
5—10 . . .	990	10	.	966	33	1
10—15 . . .	916	82	2	725	271	4
15—20 . . .	709	280	11	237	745	18
20—40 . . .	257	691	52	21	895	84
40—60 . . .	77	772	151	5	609	386
60 and over . . .	60	594	346	5	219	776
UNITED PROVINCES.						
0—5 . . .	994	6	.	990	9	1
5—10 . . .	944	54	2	887	109	4
10—15 . . .	757	237	6	449	639	12
15—20 . . .	489	493	18	99	873	28
20—40 . . .	166	775	59	23	863	114
40—60 . . .	73	762	165	12	529	459
60 and over . . .	58	591	351	10	178	812
HYDERABAD.						
0—5 . . .	988	12	.	977	21	2
5—10 . . .	959	38	3	810	179	11
10—15 . . .	857	133	10	403	561	33
15—20 . . .	631	350	19	116	831	53
20—40 . . .	149	805	46	73	780	147
40—60 . . .	44	833	123	28	456	516
60 and over . . .	36	703	261	20	171	806

SUBSIDIARY

Distribution of 1,000 of each age and sex

CASTE		DISTRIBUTION OF 1,000 MALES OF EACH AGE BY CIVIL CONDITION																	
		TOTAL			0-5			5-12			12-20			20-40			40 and over		
		Unmarried,	Married	Widowed.	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
AJMER																			
Gujar	416	488	96	997	3		895	95	10	555	396	49	228	675	97	81	672	247	
Rajput	480	416	104	986	13	1	953	44	3	769	177	54	292	631	77	127	609	264	
Mali	425	499	76	997	3		943	50	7	662	310	28	107	800	93	44	772	184	
AS																			
Rajbansi	558	394	48	1,000	...		989	10	1	889	108	3	285	669	46	30	808	162	
Shaha	588	366	46	1,000	...		995	4	1	939	60	1	405	564	31	98	744	158	
Bilhimani	571	375	54	1,000			994	5	1	920	76	4	364	601	35	85	729	186	
Jugi	560	383	57	1,000	...	...	994	6		920	77	3	318	639	43	48	713	209
Namasudra	568	392	40	1,000			993	6	1	923	75	2	316	619	35	37	825	138	
Dom (Patni)	568	379	53	1,000		..	995	5		929	69	2	326	627	37	18	762	190	
Kayastha	582	369	49	1,000			993	6	1	924	71	2	383	545	32	92	736	172	
Sudra Das	613	348	39	1,000		..	995	5		967	33		386	586	23	60	791	149	
Halwa Das	586	365	49	1,000			992	8		940	59	1	312	622	36	41	774	185	
Kalita	590	362	48	1,000			994	6	..	930	65	5	271	684	45	20	802	178	
Koch	598	357	45	1,000			992	8		939	56	5	284	667	45	22	817	161	
Manipuri	572	394	34	1,000		...	994	5	1	918	80	2	200	765	35	30	851	119	
Chutia	585	362	53	1,000		...	989	11	..	938	57	5	286	660	54	31	778	191	
BN																			
Alur and Goala	882	560	58	982	17	1	781	213	6	464	510	17	85	857	58	19	807	174	
Desadh	352	597	51	975	24	1	740	253	7	386	588	26	50	898	52	15	846	139	
Chamar	394	568	38	970	29	1	759	235	6	434	548	18	59	902	39	15	864	121	
Hajjam and Napit	438	508	54	985	15	..	875	121	4	592	393	15	115	838	47	25	800	175	
Koiri	370	571	59	981	18	1	769	226	5	416	566	18	81	863	56	18	808	174	
Tanti and Tatwa	421	530	49	985	15	..	856	138	6	610	369	15	104	858	38	21	825	154	
Kurmi	405	548	47	989	10	1	848	148	4	482	506	12	80	877	43	26	822	152	
Jolaha	430	523	38	991	9	...	883	115	2	540	446	14	62	900	38	12	864	124	
Namasudra (Chandal)	518	440	47	999	2		987	12	1	826	170	4	166	797	37	21	811	168	
Bráhman	485	459	56	997	3		966	33	1	727	267	6	189	771	40	57	753	190	
Rajbansi Koch	551	391	58	998	2	...	989	10	1	845	150	5	262	684	54	36	769	195	
Babhan	482	455	63	989	10	1	943	55	2	624	363	13	239	705	56	80	728	192	
Rajput	509	434	57	992	8		958	40	2	729	257	14	257	695	48	70	751	179	
Kayastha	520	430	50	997	3		984	15	1	840	155	5	215	749	36	51	781	168	
Chasa	508	463	29	1,000	...	...	984	16	..	830	168	2	163	816	21	9	881	110
Santal	570	407	23	998	2	...	987	13	..	825	171	4	162	811	27	15	896	89	
Khandait	542	425	33	1,000		...	990	10		879	119	2	205	774	21	12	856	132	

TABLE IV.

by civil condition for the main castes.

DISTRIBUTION OF 1,000 FEMALES OF EACH AGE BY CIVIL CONDITION																		CASTE
TOTAL			0-5			5-12			12-20			20-40			40 AND OVER			
Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
MERWARA.																		38.
228	551	221	1,000	..		727	260	13	215	736	49	14	818	138	3	381	616	Gujar
266	468	266	990	10		764	227	9	330	626	44	34	759	207	26	309	665	Rajput
229	525	246	1,000			783	209	8	175	791	34	13	770	217	12	263	725	Mali.
SAM.																		
314	402	254	1,000	..		835	155	10	114	793	93	12	691	294	7	203	790	Rajbansi
295	376	329	999	1		853	138	9	83	830	87	10	656	334	4	130	866	Shaha
307	419	274	1,000			842	151	7	87	837	76	8	679	313	3	168	829	Bráhmán
279	407	311	999	1		848	144	8	41	857	102	9	623	368	5	154	841	Jugi
308	118	274	1,000			853	138	9	55	867	78	25	664	311	5	185	810	Namasudra
304	416	280	1,000	...		873	120	7	65	850	85	10	663	327	6	179	815	Dom (Patni)
298	389	313	999	1		885	110	5	51	871	78	9	644	347	4	142	854	Kayastha
307	387	306	999	1	...	909	85	6	78	816	76	8	649	343	3	180	817	Sudia Das
336	375	289	999	1		922	72	6	107	820	73	6	654	340	8	154	838	Halwa Das
411	385	204	999	1		954	44	2	379	602	19	19	801	180	6	255	739	Kahla
435	379	186	998	2	...	970	29	1	476	500	21	29	808	163	8	269	703	Koch
138	402	160	1,000		..	991	7	2	518	419	33	25	834	141	15	464	521	Manipuri
494	383	123	1,000			991	9		737	256	7	64	858	78	17	436	547	Chutiya
GAL.																		
259	559	182	948	50	2	595	389	16	134	817	49	11	845	144	5	424	571	Ahir and Goula
251	583	163	944	53	3	586	390	15	150	812	38	11	866	123	6	476	618	Dosadh,
284	558	158	944	54	2	647	339	14	183	782	35	15	861	121	7	461	529	Chamar
270	506	224	969	28	3	660	326	14	91	840	69	8	777	215	7	330	663	Hajjam and Napit
271	557	172	964	34	2	627	359	14	166	798	36	15	857	128	8	454	538	Koiri
269	525	206	972	27	1	670	316	14	137	814	49	9	825	166	4	374	622	Tanti and Tatwa
282	528	190	974	24	2	702	287	11	148	811	41	9	831	160	5	413	582	Kurmi
295	546	139	977	20	3	704	287	9	119	850	31	10	868	122	5	444	551	Jolaha
299	435	266	990	8	2	792	197	11	86	836	78	7	697	296	3	228	769	Namasudra (Chandal)
270	458	272	990	9	1	790	201	9	102	832	66	6	743	251	3	292	705	Bráhmán
351	428	221	991	7	2	845	148	7	129	811	60	11	717	212	5	247	748	Rajbansi Koch
275	471	254	978	19	3	838	158	9	205	740	55	8	762	210	5	359	636	Babhan
292	443	265	984	14	2	857	186	7	248	702	50	10	764	226	5	326	669	Rajput
293	417	290	992	6	2	881	112	7	132	801	64	7	718	275	3	242	755	Kayastha
367	461	172	1,000		..	938	66	1	342	643	15	11	885	104	5	381	614	Chasa.
475	409	116	993	6	1	958	40	2	515	460	25	52	847	101	10	500	490	Santal
358	426	216	999	1		944	54	2	400	575	25	8	823	169	3	330	667	Khandait-

SUBSIDIARY

Distribution of 1,000 of each age and sex

CANTON		DISTRIBUTION OF 1,000 MALES OF EACH AGE BY CIVIL CONDITION																	
		TOTAL			0-5			5-15			15-20			20-40			40 and over		
		Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
1.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
BE																			
Wanjari	331	612	57	984	16		845	139	16	298	645	57	25	912	63	9	861	130	
Mali	280	640	80	988	12	..	828	166	6	260	717	23	35	897	68	12	790	198	
Kunbi	297	625	78	986	14	...	883	110	7	339	628	33	37	882	81	11	815	174	
Teli	350	576	74	991	9	..	916	78	6	546	434	20	58	873	69	15	802	183	
Mahur	454	503	43	987	13	..	962	37	1	710	252	8	114	842	44	17	852	131	
Wani	384	537	79	997	3	...	974	26		656	323	21	156	784	60	45	741	214	
Shekh	502	447	51	992	8	..	975	23	2	879	116	5	233	719	48	29	818	153	
BOM																			
Kunbi (Maráthá)	474	478	48	994	6	..	971	28	1	815	177	8	97	866	37	21	810	169	
Berid	531	406	63	976	23	1	975	23	3	833	153	14	191	745	61	39	747	211	
Mahan	500	450	50	989	11		966	32	2	802	184	14	101	844	55	13	836	151	
Maráthá	470	177	53	992	8	...	957	41	2	857	137	6	104	856	10	15	814	171	
Brahman	466	468	66	985	13	2	960	37	3	711	271	18	161	779	60	72	725	203	
Vani	412	490	98	983	6	11	928	66	6	560	374	66	200	711	86	64	701	235	
Bhil	535	415	50	993	7	...	984	16	...	879	112	9	121	785	94	16	864	121	
Parbhu	540	416	44	992	8	...	983	17	...	912	86	2	161	803	36	28	799	173	
BUR																			
Burmese	531	422	47	1,000	..	..	1,000	...	...	927	69	4	161	779	60	55	816	139
Shan	572	408	20	1,000		...	1,000	...		966	33	1	296	687	17	53	878	69	
Chin	520	435	45	1,000			1,000			882	111	7	267	684	49	31	849	120	
Karen	619	337	44	1,000			1,000			975	23	2	287	668	45	55	763	182	
Kachin	601	366	33	1,000		...	1,000		..	953	45	2	404	563	33	81	817	102	
CENTRAL																			
Sonar	428	505	67	996	4	...	914	84	2	641	342	17	118	802	80	33	782	185	
Bania	422	484	94	958	42		919	76	5	650	317	33	201	693	106	77	709	214	
Gosain	479	438	83	982	17	1	943	53	4	703	272	25	217	700	63	138	648	214	
Lodhi	446	493	61	994	5	1	931	68	1	663	318	19	119	814	67	21	797	182	
Kirar	465	464	71	996	2	2	929	69	2	636	343	21	133	770	97	17	780	203	
Kori	418	485	97	953	34	13	951	45	4	653	316	31	147	752	101	28	712	260	
Mahar	492	463	45	989	11	...	976	23	1	843	151	6	150	807	43	15	845	140	
Brahman	447	473	80	997	3	...	948	51	1	694	288	18	192	739	69	62	706	232	
Dangi	466	456	78	1,000	..		968	32	...	703	294	3	199	724	77	36	727	237	
MAD																			
Kalangi	398	508	31	992	8	...	882	113	5	438	545	17	31	942	27	7	861	112	
Kapu	516	416	38	995	5	..	957	42	1	790	206	4	244	733	23	43	824	133	

TABLE IV—*contd.*by civil condition for the main castes—*contd.*

DISTRIBUTION OF 1,000 FEMALES OF EACH AGE BY CIVIL CONDITION																		CASTE.
TOTAL			0-5			5-12			12-20.			20-40			40 AND OVER.			
Unmarried.	Married.	Widowed	Unmarried.	Married.	Widowed	Unmarried	Married.	Widowed	Unmarried.	Married	Widowed.	Unmarried	Married.	Widowed	Unmarried	Married	Widowed	
80.	1	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
BAR.																		38
185	614	201	944	51	5	384	576	40	22	915	63	5	816	170	4	325	671	Wanjali
155	652	193	962	37	1	275	704	21	48	916	36	7	874	119	3	411	586	Mal
172	636	192	958	41	1	371	608	21	30	924	46	7	874	119	4	404	592	Kunbi.
208	605	187	952	18	...	536	451	13	44	920	36	9	882	109	5	383	612	Teli
325	515	160	957	43		796	198	6	220	746	34	36	840	124	18	363	599	Mahar
252	541	207	978	22	.	748	248	4	63	906	31	5	827	168		357	643	Wani.
378	444	178	983	16	1	930	68	2	430	550	20	34	843	123	14	365	621	Shekh
BAY.																		
273	492	235	981	17	2	692	285	23	62	839	99	7	762	231	4	374	622	Kunbi (Maráthá)
457	382	161	969	30	1	850	143	7	328	634	38	159	699	142	158	267	575	Berad
325	482	193	984	16		783	202	15	165	779	56	19	827	154	8	408	584	Mahar
383	479	238	984	15	1	751	232	17	85	825	90	7	775	218	5	348	647	Marathá.
384	463	253	989	11		843	151	6	104	803	93	27	716	257	25	299	676	Bráhmán
242	491	267	986	12	2	903	93	4	193	745	62	11	761	238	5	363	632	Vani.
445	429	126	994	5	1	954	44	2	449	522	29	30	827	143	8	440	552	Bhil
391	404	205	991	9		959	40	1	238	725	37	9	768	223	5	304	691	Paibhu
MA																		
444	418	138	1,000			998	2		700	276	24	98	782	120	49	550	401	Burmese
524	403	73	1,000			1,000	..	.	776	220	4	185	765	50	71	627	302	Shan
435	467	98	1,000	...	...	1,000	.	..	740	252	8	185	748	67	21	692	287	Chin
545	363	92	1,000	..		1,000	...	...	820	175	5	160	772	68	74	479	447	Karen
492	330	178	1,000	...		1,000	..	.	825	168	7	230	642	128	61	352	587	Kachin
PROVINCES.																		
281	477	242	990	10		819	175	6	208	731	61	16	747	237	4	308	693	Sonar
241	516	243	975	16	9	821	171	8	189	774	37	6	797	197	4	352	644	Bania
308	473	219	990	19	1	877	418	5	401	555	44	50	795	155	13	366	621	Gosain
292	489	219	989	11		878	124	3	251	618	131	10	788	202	7	426	567	Lodhi
313	476	211	997	2	1	874	124	2	255	674	71	10	804	186	10	302	608	Kirar
305	473	222	994	6		838	158	4	486	526	38	23	751	226	13	387	600	Kori
379	473	148	985	14	1	936	61	3	536	446	18	26	870	104	8	458	534	Mahar
252	490	258	995	4	1	899	98	2	118	818	64	1	750	249	1	351	648	Bráhmán
264	498	238	1,000	...	..	891	107	2	217	733	50	6	737	257	1	414	585	Dangi
EAS.																		
215	579	206	942	58	..	451	533	16	40	899	61	6	827	167	3	361	696	Kalungi.
311	462	227	966	33	1	756	236	8	258	701	41	2	791	197	6	324	670	Kapu

SUBSIDIARY

Distribution of 1,000 of each age and sex

CASTE.	DISTRIBUTION OF 1,000 MALES OF EACH AGE BY CIVIL CONDITION.																	
	TOTAL			0-5.			5-12			12-20			20-40.			40 and over		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19.
MADRAS																		
Konati	497	461	42	999	1		994	6		833	165	2	209	767	24	33	827	140
Bráhmaṇ	472	477	51	998	2		992	8		793	204	3	163	811	26	44	783	173
Mala	552	421	27	998	2		992	8		891	107	2	154	818	28	8	899	98
Kavarai	560	400	40	999	1		997	3		951	48	1	304	669	27	28	834	189
Paraiyan	584	389	27	999	1		996	4		953	46	1	198	776	26	11	888	101
Kammala	562	401	37	998	2		996	4		958	41	1	273	703	24	21	845	134
Vellala	554	407	39	999	1		996	4		932	68		259	718	23	31	826	143
Shanan	590	374	36	999	1	...	997	3		973	27		288	690	22	17	839	144
PUN																		
Gújar, H	506	422	72	999	1	...	941	58	1	729	262	9	263	679	58	73	692	235
Rajput, H	566	369	65	1,000		...	990	10	...	863	131	6	355	591	54	128	674	198
Jat, H	509	415	76	999	1		948	50	2	662	325	18	261	672	67	122	643	235
Gújar, M	527	410	63	1,000	...	...	974	25	1	809	185	6	249	697	54	44	754	202
Chubra, H	547	402	51	1,000	...		983	16	1	795	198	7	174	776	50	33	776	191
Jat, S	524	411	65	1,000			979	20	1	758	235	7	275	679	46	109	687	204
Khatti, H	539	394	67	1,000	...	...	988	11	1	796	199	5	311	639	50	154	637	209
Khatti, S	532	403	65	1,000	...	...	989	11		851	144	5	324	644	32	144	650	206
Rajput, M	575	373	52	999	1	...	993	7		895	102	3	321	640	39	62	758	180
Arora, H	546	392	62	1,000	...	...	994	6	...	827	168	5	281	669	50	97	692	211
Arora, S	517	419	64	1,000	...	...	993	7	...	790	206	4	245	715	40	74	717	209
Chubra, M	575	378	47	1,000		...	996	4	...	881	114	5	239	720	41	30	790	180
UNITED																		
Kumhar	327	582	91	910	76	14	760	217	23	267	676	57	88	815	97	75	727	198
Kol	375	558	67	984	16	...	809	191	...	517	468	15	91	833	76	66	735	199
Kurmi	341	575	84	971	21	8	820	171	9	268	672	60	47	848	105	41	752	207
Ahír	382	499	119	916	77	7	781	249	20	327	585	88	149	714	187	99	636	265
Taga	412	476	112	992	8	...	878	120	2	431	495	74	218	696	86	78	648	274
Vaishya or Bania	341	541	118	960	34	6	777	205	18	324	602	74	121	764	115	62	669	269
Páni	425	533	42	995	5	...	884	114	2	508	483	9	94	869	37	35	829	136
Kori	368	514	128	913	67	20	800	186	14	368	529	103	92	785	153	58	680	262
Dom	495	470	35	998	2		983	17	...	771	226	3	154	818	28	21	851	128
Tharu	501	429	70	1,000	...		992	8	...	761	234	5	175	766	59	39	714	247
Saharya	489	455	56	1,000	...	...	980	17	3	685	303	12	104	828	68	81	760	159
BAR																		
Kunbi (Anjana)	360	554	36	966	33	1	731	253	16	418	526	56	121	796	83	64	692	244
„ (Kadava)	364	546	90	986	14	...	820	173	7	379	586	35	84	800	116	47	712	241

TABLE IV—*contd.*by civil condition for the main castes—*contd.*

DISTRIBUTION OF 1,000 FEMALES OF EACH AGE BY CIVIL CONDITION																			CASTE
TOTAL			0-5			5-13			13-20			20-40			40 AND OVER				
Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.		
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37		
—contd.																			
263	470	267	994	6	...	756	237	7	33	901	66	4	758	238	2	296	702	Komati	
254	468	278	995	5	...	807	190	3	49	895	56	6	757	237	3	278	719	Bráhmán.	
390	447	163	996	4	...	900	97	3	274	692	34	14	844	143	5	399	596	Vála	
384	412	204	997	3	.	954	46	...	473	515	13	20	822	158	10	336	654	Kavaraí	
452	411	137	998	2	.	978	22	.	550	438	12	42	854	104	13	442	545	Paraiyan	
408	404	188	998	2	..	980	19	1	585	403	12	17	839	144	6	374	620	Kammala	
417	406	177	999	1	..	981	19	.	657	336	7	24	847	129	5	400	595	Vellala	
453	373	174	999	1	..	996	4	.	743	253	4	28	841	131	4	392	604	Shanan	
JAB.																			
302	548	150	998	2	...	815	183	2	240	748	12	4	906	90	1	495	504	Gújar, H.	
298	461	241	998	2	.	873	125	3	251	712	37	6	789	205	1	314	645	Rajput, H	
304	545	151	998	2	..	861	137	2	234	754	12	4	914	82	1	502	497	Jat, H.	
383	491	126	998	2	..	913	86	1	469	522	9	27	901	72	7	546	447	Gújar, M.	
429	477	94	999	1	...	955	45	.	440	551	9	12	932	56	3	570	427	Chuhra, H	
304	555	141	999	1	.	932	67	1	361	630	9	6	927	67	1	560	439	Jat, S	
330	486	184	999	1	.	951	48	1	322	660	18	6	868	126	2	424	574	Khattri, H	
321	495	134	996	4	..	948	50	2	414	561	25	4	879	117	2	447	551	Khattri, S	
419	434	147	999	1	.	967	32	1	598	388	14	40	864	96	6	472	523	Rajput, M	
380	456	164	999	1	...	969	30	1	404	532	14	8	867	125	3	429	568	Arora, H	
368	504	128	1,000	...	.	975	24	1	387	599	14	8	913	79	2	550	418	Arora, S
461	447	92	999	1	...	984	16	..	596	398	6	28	918	54	5	590	405	Chuhra, M.	
PROVINCES.																			
321	517	162	777	188	35	548	403	49	303	572	125	119	701	180	91	557	352	Kumhar.	
285	579	136	951	49	.	521	459	20	203	734	63	33	792	175	10	661	329	Kol	
299	522	179	867	129	4	690	300	10	271	566	163	46	695	259	23	644	333	Kurmi	
346	522	132	926	67	7	706	273	21	267	654	79	66	785	149	76	600	324	Ahir	
278	548	174	963	13	....	667	331	2	208	721	74	32	754	214	12	576	410	Taga
276	566	158	951	41	8	665	318	17	194	730	76	38	795	167	32	586	382	Vaishya or Bania	
330	554	116	996	4	..	768	229	3	190	802	8	18	922	60	12	544	444	Pási	
294	588	118	935	63	2	776	217	7	278	693	29	48	860	92	17	595	388	Kori	
345	525	130	998	2	...	855	142	3	233	751	16	13	904	83	5	468	527	Dom	
411	505	84	992	6	2	973	25	2	339	655	6	13	942	45	7	595	398	Tharu.	
327	534	139	1,000	...	.	971	27	2	303	685	62	26	843	131	29	504	467	Saharya.
ODA.																			
259	524	217	933	66	1	624	359	17	165	774	61	4	748	248	...	398	602	Kunbi (Anjana).	
235	580	185	971	24	5	629	354	17	47	890	63	1	844	155	...	398	602	.. (Kadava).	

SUBSIDIARY

Distribution of 1,000 of each age and sex

DISTRIBUTION OF 1,000 MALES OF EACH AGE BY CIVIL CONDITION																		
CAST	Total			0-5			5-12			12-20			20-40			40 AND OVER		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
BARODA																		
Momana, M . . .	356	562	82	969	31	...	766	224	10	391	582	27	100	829	71	16	718	266
Vohom M . . .	431	472	97	885	115		890	104	6	639	341	20	258	642	100	63	696	241
Chandrasena Kiyastha	285	605	110	1,000			757	243	..	361	631	8	52	832	116	105	629	266
Prabhu																		
Rajput . . .	451	440	109	962	29	9	862	124	14	587	363	50	208	648	144	65	677	258
Kunbi (Leva) .	464	476	60	942	49	9	962	33	5	692	261	44	188	758	54	227	572	201
Maráthá . . .	357	571	72	926	62	12	912	60	28	641	290	69	57	885	58	106	690	204
CENTRAL																		
Maráthá . . .	376	510	114	976	23	1	901	92	7	507	407	86	166	731	103	85	657	258
Khangar . . .	413	462	125	985	15	..	727	267	6	500	439	61	152	652	196	72	643	285
Dhangui . . .	349	559	92	993	7		929	71	...	354	574	72	77	819	104	52	726	222
Seheria . . .	491	408	101	996	4		956	41	3	691	283	26	127	717	156	59	669	281
Sondhua . . .	387	460	153	996	4	...	915	72	13	464	424	112	143	635	222	50	690	260
Rajput . . .	426	445	129	988	12		887	108	5	540	421	39	200	639	161	115	587	298
Kol . . .	513	417	70	975	22	3	760	236	4	685	296	19	222	685	93	79	707	214
Blullala . . .	540	404	56	993	7		943	55	2	812	176	12	209	692	99	34	833	138
Gond . . .	430	495	75	966	31	3	955	26	19	702	268	30	126	792	82	41	759	200
Bhil . . .	504	409	87	994	6	..	925	71	4	779	195	26	193	695	112	32	698	270
CO																		
Kudumi Chetti .	507	453	40	1,000	..		999	1		902	96	2	200	776	24	23	815	162
Native Christian .	562	400	38	1,000	..	..	999	1		921	78	1	166	809	25	19	810	171
Bráhma (Malayali)	556	424	20	1,000		...	1,000		...	948	52		393	594	13	139	800	61
Iluvan . . .	579	383	38	1,000	...		999	1	..	950	49	1	220	743	37	19	832	149
Mappilla, M . .	601	373	26	1,000	...		999	1	...	971	29	..	264	707	29	18	881	101
Nayar . . .	665	296	39	1,000			1,000	..		989	11	1	472	498	30	84	748	168
Kshatriya (Malayali)	637	340	23	1,000	...		1,000	..		964	36	...	386	598	16	91	818	91
HYDE																		
Vanu Langayet . .	609	192	199	994	6		719	262	19	756	133	111	318	460	222	81	150	769
„ Dikshawanth . .	418	516	66	980	14	6	924	60	16	682	277	41	119	819	62	22	819	159
Kumuti . . .	371	490	139	985	13	3	820	166	14	386	533	81	177	698	130	63	617	330
Dhangar . . .	403	548	49	967	29	4	914	79	7	506	465	29	79	875	46	13	860	127
Bráhma . . .	477	412	111	998	2	...	792	188	20	378	555	67	193	688	119	72	580	349
Ghond . . .	467	490	43	957	42	1	906	88	6	578	411	16	114	842	44	268	641	91
Kunbi . . .	449	448	103	995	4	1	863	131	16	438	480	82	120	760	120	35	708	257
Sheikh . . .	532	417	51	999	1	...	982	17	1	825	159	16	306	657	37	50	790	160
Saied . . .	503	431	61	1,000	...	...	970	30	...	732	260	8	330	623	47	50	768	182

TABLE IV—*contd.*by civil condition for the main castes.—*contd.*

DISTRIBUTION OF 1,000 FEMALES OF EACH AGE BY CIVIL CONDITION																		CASTE
TOTAL			0-5			5-12			12-20			20-40			40 AND OVER			
Unmarried.	Married	Widowed	Unmarried.	Married.	Widowed.	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
—contd.																		
238	600	162	917	77	6	636	353	11	70	865	65		681	119		459	541	Womana, M
307	537	156	896	155	9	792	196	12	237	731	32	99	715	156	6	600	394	Vohora, M.
213	574	213	990	10	..	643	337	20	161	778	58		717	283		535	465	Chandrasena Prabhu Rajput
279	487	234	955	37	8	784	198	18	232	651	117	19	719	262	7	429	564	Kunbi (Leva).
208	562	280	907	84	9	811	177	12	212	733	55	8	814	178	2	372	628	Maráthá.
190	526	278	893	85	22	832	146	22	391	526	80	22	816	162	25	229	716	
INDIA.																		
255	488	257	978	21	1	727	262	11	251	668	81	46	735	219	49	337	614	Maráthá
334	486	180	988	12	..	803	189	8	314	575	81	52	721	227	12	522	466	Khangar
235	557	208	970	28	2	758	228	14	132	772	96	27	728	215	16	571	413	Dhangar.
466	410	124	989	11		899	85	16	380	560	60	64	731	205	58	574	368	Sehena.
238	552	230	985	13	2	793	176	31	207	622	171	19	785	346	16	523	461	Sondhia.
320	494	186	966	33	1	815	148	7	354	607	46	53	706	241	32	530	438	Rajput
454	411	135	977	19	4	887	102	11	578	373	49	127	766	107	47	521	429	Kol
445	396	159	986	14		914	80	6	608	362	30	63	756	181	21	317	632	Bhillala
299	503	198	953	40	7	805	180	15	438	507	55	92	723	185	33	410	527	Gond
412	396	192	977	22	1	921	72	7	554	390	56	59	706	235	23	330	647	Bhil
CHIN.																		
277	504	219	1,000	..		916	84	..	75	893	32	30	784	186	7	368	725	Kudumi Chetti
466	406	128	1,000	..	..	995	5		622	373	5	41	866	90	10	416	574	Native Christian
397	371	232	1,000	..		996	4	..	700	289	11	60	790	130	38	318	644	Bráhman (Malayali).
487	369	144	1,000	..		997	3	..	712	277	11	83	794	123	12	391	594	Iluvan.
491	386	123	1,000	..	..	997	3	..	655	329	16	63	832	105	14	422	564	Mappilla, M
444	341	215	1,000		..	998	2	..	636	313	21	137	691	172	25	283	692	Nayar.
431	408	161	1,000		..	1,000	..	..	543	443	14	95	839	66	20	366	614	Kshatriya (Malayali)
RABAD.																		
332	373	295	984	15	1	669	419	12	392	393	215	55	486	459	17	461	521	Vani Lingayet
246	542	212	955	37	8	586	391	23	120	830	50	22	844	131	15	298	687	„ Dikshawanth
293	497	210	986	14	..	528	452	20	105	804	91	19	707	274	19	384	597	Kumuti.
275	547	178	955	41	4	701	282	17	112	607	81	18	832	150	15	489	496	Dhangar.
330	434	236	993	7	..	621	362	17	175	716	109	33	647	320	22	373	605	Brahman
362	502	136	944	55	1	792	200	8	250	721	29	50	853	97	43	465	493	Ghond
336	487	177	987	12	1	674	315	11	135	781	84	34	751	215	30	431	539	Kunbi.
410	412	178	991	9		914	54	2	438	516	46	71	800	129	29	368	608	Sheakh
371	445	184	979	21	..	954	41	5	488	488	24	47	845	108	36	346	618	Salad.

SUBSIDIARY

Distribution of 1,000 of each age and sex

Caste	DISTRIBUTION OF 1,000 MALES OF EACH AGE BY CIVIL CONDITION.																	
	Total			0-5			5-12			12-20			20-40			40 AND OVER.		
	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
KASH																		
Bráhmaṇ	454	439	107	1,000			970	22	8	552	398	50	45	808	147	14	705	231
Rajput	258	544	200	1,000		...	576	403	21	271	574	155	14	728	263	7	669	324
Dar, M	284	512	201	1,000	...	...	979	21		278	521	201	..	780	220		593	407
Mahar M	395	460	145	1,000		..	984	16	...	384	453	163	61	744	195		755	245
Kashmiri, M	321	463	216	1,000		...	1,000			261	551	188		732	268	..	645	355
Bashkan, M	320	448	232	1,000			1,000	..	...	268	318	414	..	617	383	..	719	281
MY																		
Brahman	472	455	73	1,000	...	..	997	3	...	799	197	4	161	794	45	50	716	234
Agasa	546	404	50	1,000			996	4	..	910	89	1	229	732	39	29	801	170
Panchala	543	401	53	1,000		...	998	2	...	916	83	1	259	703	38	40	777	183
Golla	567	375	58	1,000	..		996	4	..	921	78	1	305	654	41	48	757	195
Kurubi	542	412	46	1,000		...	997	3	...	925	74	1	238	727	35	24	822	154
Beda	579	364	57	1,000			997	3	...	925	73	2	307	653	40	62	740	198
Banajiga	533	401	63	1,000	..	...	994	6	..	890	108	2	275	681	44	48	754	198
Langivot	562	382	56	1,000			998	2		935	64	1	290	668	42	41	766	193
Neygi	523	413	61	1,000			998	2	...	898	99	3	197	750	53	28	771	201
Vakkaliga	519	396	55	1,000			998	2	...	917	82	1	273	693	34	25	782	193
Madiga	510	367	43	1,000			998	2	...	912	87	1	269	699	32	47	795	158
Bertha	546	409	45	1,000	...		999	1	...	934	65	1	244	719	37	30	822	148
Uppari	562	391	44	1,000		...	999	1	..	937	63	...	262	703	35	27	821	152
Vadda	562	395	43	1,000	..	..	997	3	...	918	81	1	254	711	35	34	826	140
Holaya	568	388	44	1,000			998	2	..	935	64	1	307	657	36	39	816	145
Tigala	562	391	47	1,000			998	2	...	908	91	1	247	712	41	19	828	153
Lambani	607	355	38	1,000		...	999	1	..	953	46	1	269	695	36	21	838	141
RAJPU																		
Chamai (Hindu)	420	518	62	1,000	..	..	899	98	3	472	424	34	90	845	65	30	787	183
Jai	454	454	87	981	18	1	945	51	4	664	316	20	237	670	93	85	703	212
Bráhmaṇ	457	439	101	998	2	...	972	25	3	664	307	29	247	651	102	109	638	253
Rajput	530	387	83	999	1	..	980	18	2	774	193	33	356	558	86	151	659	190
Mahajan	460	441	93	997	3		975	23	2	657	314	29	246	657	97	128	661	211
Gujar	486	444	70	997	3		977	22	1	689	283	26	229	697	74	69	740	191
Mahajan (Jain)	496	409	95	998	2		966	32	2	709	257	34	288	631	86	129	613	258
Mina (Hindu)	480	416	74	997	3	...	976	22	2	758	212	30	230	695	75	113	714	173
Bhil (Animist)	503	390	107	999	1	..	981	15	4	823	127	50	191	661	148	55	694	251
Meo (Muselman)	520	428	52	1,000	...	...	985	14	1	749	245	6	166	734	50	41	782	177
Charan (Hindu)	549	366	85	1,000	..	...	1,000	...	...	735	255	10	166	667	167	96	673	231
TRAVAN																		
Native Christian	506	456	38	1,000	..	...	998	2	...	835	162	3	121	850	29	11	839	150
Bráhmaṇ (Malayala)	439	500	61	1,000		...	988	12	...	900	96	4	282	711	57	50	812	138
Ilavan	535	417	48	1,000	...	...	999	1	...	940	56	4	218	731	51	14	830	156
Nayar	557	387	56	1,000	...	...	999	1	..	967	30	3	307	633	60	22	811	167

TABLE IV—*concl'd.*by civil condition for the main castes—*concl'd.*

DISTRIBUTION OF 1,000 FEMALES OF EACH AGE BY CIVIL CONDITION.																			CASTE
TOTAL			0-5.			5-12.			12-20			20-40			40 AND OVER.				
Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.		
30.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.		
MIR.																			
462	430	108	999	1	.	647	348	5	554	364	82	111	724	165	12	710	278	Bráhmaṇ	
243	535	222	1,000	.	.	603	376	21	272	581	147	.	724	272	.	631	369	Rajput	
263	489	248	1,000	..	.	970	80	..	284	505	211	..	761	239	..	525	475	Dar, M	
427	445	128	1,000	..	.	987	13	.	292	553	155	1	767	232	.	781	219	Maliar, M	
298	468	234	1,000	...	.	1,000	.	.	253	558	189	.	718	282	.	626	374	Kashmiri, M
345	569	86	1,000	...	.	1,000	...	.	364	361	275	.	761	239	.	966	34	Bashkan, M
SORE.																			
272	465	263	1,000	...	.	826	172	2	47	898	55	3	717	250	1	325	674	Bráhmaṇ.
386	423	191	999	1	.	935	64	1	387	593	20	16	822	162	6	396	598	Agasa	
376	426	198	999	1	.	936	63	1	332	643	25	17	805	178	6	385	609	Panchala	
391	399	210	998	2	.	942	57	1	472	503	25	37	782	181	7	384	609	Golla	
384	421	195	999	1	.	940	59	1	452	530	18	17	829	154	5	386	609	Kuruba	
411	399	190	1,000	.	.	944	55	1	454	523	28	86	749	165	51	404	545	Beda	
372	417	211	999	1	.	940	57	3	391	576	33	43	778	179	24	380	596	Banajiga	
381	393	226	999	1	.	955	44	1	425	550	25	14	777	209	7	327	666	Langayot	
382	429	189	998	2	.	950	48	2	373	595	32	15	818	167	4	437	559	Neygi	
380	415	205	1,000	...	.	951	48	1	442	538	20	31	804	165	6	337	607	Vakkaliga
451	402	147	1,000	...	.	956	43	1	520	460	20	99	778	123	43	486	171	Madiga
412	414	174	1,000	..	.	956	43	1	442	539	19	46	822	132	31	391	578	Bestha	
422	369	179	1,000	.	..	965	35	.	480	500	20	23	829	148	10	374	616	Uppara	
428	429	143	1,000	.	.	961	38	1	513	472	15	33	857	110	5	507	488	Vadda	
414	416	170	1,000	..	.	968	31	1	527	453	20	60	798	142	26	458	516	Holaya	
422	420	158	999	1	.	971	28	1	506	479	15	35	826	139	10	518	472	Tigala	
487	404	109	1,000	...	..	977	22	1	613	383	4	16	910	74	5	515	480	Lambani
TANA.																			
298	564	138	999	1	.	760	235	5	157	795	48	8	897	95	1	503	196	Chamar (Hindu).	
345	495	157	985	14	1	874	121	5	318	648	34	30	789	181	6	557	437	Jat (Hindu)	
286	481	233	997	3	...	867	128	5	330	618	52	9	771	220	3	419	578	bráhmaṇ (Hindu)	
281	474	245	996	4	.	891	105	4	390	554	56	20	738	242	4	429	567	Rajput (Hindu)	
303	486	211	995	4	1	901	95	4	357	599	44	9	735	256	3	526	471	Mahajan (Hindu).	
365	471	164	997	3	..	934	63	3	188	776	36	9	749	242	4	578	418	Gujar (Hindu)	
281	461	258	988	12	...	927	69	4	322	599	79	17	717	238	5	312	653	Mahajan (Jain)	
309	514	177	991	8	1	927	69	4	303	643	54	17	761	222	6	626	368	Mina (Hindu)	
379	439	182	977	23	..	954	43	8	608	327	65	51	752	197	12	433	555	Bhil (Animist).	
405	474	121	1,000	.	..	953	46	1	462	532	6	17	909	74	5	526	469	Meo (Musliman)	
283	448	269	952	48	.	1,000	..	...	345	569	86	10	758	232	..	273	727	Chaman (Hindu)
CORE.																			
446	451	103	1,000	...	..	987	13	...	511	483	6	36	894	70	14	512	474	Native Christian
340	436	224	1,000	...	.	983	16	3	569	415	16	45	817	138	11	383	606	Bráhmaṇ (Malayala).
451	401	148	1,000	.	.	995	4	1	700	285	15	84	797	119	17	131	552	Ilavan.	
425	389	186	1,000	...	..	995	4	1	668	314	18	80	773	147	18	374	608	Nayar.

SUBSIDIARY TABLE V.

Proportion who are married and widowed at certain ages.

PROVINCE, STATE OR AGENCY.	NUMBER PER 1,000 AGED 0-10 WHO ARE MARRIED						NUMBER PER 1,000 AGED 15-40 WHO ARE WIDOWER					
	Male			Female			Male			Female		
	1801	1891	1881	1801	1891	1881	1801	1891	1881	1801	1891	1881
	2	3	4	5	6	7	8	9	10	11	12	13
	<i>Hindu.</i>											
INDIA.	28	28	30	70	70	87	47	36	42	137	123	142
Ajmer-Merwara	25	30	17	67	73	48	86	34	35	135	71	84
Assam	8	2	1	18	16	8	54	40	34	181	168	141
Bengal	52	44	54	115	112	133	86	87	38	166	172	181
Bengal Proper	7	5	5	76	90	104	31	33	37	232	257	291
Bihar	113	93	111	186	161	193	47	47	44	139	117	118
Orissa	5	4	4	21	19	31	20	22	23	110	111	111
Chota Nagpur	32	29	35	83	78	85	35	38	28	122	119	100
Berar	27	33	40	170	218	213	59	45	44	123	80	82
Bombay	25	31	28	83	113	103	63	33	47	148	96	136
Burma	3		2	3	—	2	26	23	28	56	61	58
Central Provinces	26	24	25	58	65	78	63	85	37	129	79	82
Coorg	4	4	1	3	7	5	46	32	52	110	134	183
Madras	5	6	8	27	36	43	21	18	26	131	128	164
N.-W. F. and Punjab	9	17	11	29	48	37	50	59	50	84	127	100
United Provinces	32	25	23	61	53	53	51	18	54	102	92	96
Baroda State	66	85	73	103	173	171	107	37	42	182	80	101
Central India Agency	49			86	..		82	..		160		
Cochin State . . . . .	..	1		1	12	..	26	12		110	55	
Hyderabad State	26	21	27	107	126	134	42	27	39	133	105	183
Kashmir State	7			46	..		41			141		
Mysore State . . . . .	..	1	3	10	26	25	30	26	56	142	154	238
Rajputana Agency	21			57	..		83			152	..	
Travancore State	1	1	..	2	3		41	10		99	44	
	<i>Musalman.</i>											
INDIA.	10	9	9	39	43	49	34	33	32	98	103	110
Ajmer-Merwara	19	15	9	30	41	34	56	34	35	80	64	83
Assam	3	1	2	12	13	8	29	22	15	181	115	100
Bengal	12	11	12	61	67	78	25	23	24	122	120	138
Bengal Proper	8	7	7	57	61	73	23	22	22	121	125	138
Bihar	36	32	38	86	87	101	36	32	33	138	131	141
Orissa	2	4	3	24	11	13	15	16	16	118	131	139
Chota Nagpur	56	59	70	136	124	145	31	57	28	106	139	102
Berar	11	8	12	24	27	30	89	92	86	113	93	102
Bombay	11	10	9	26	28	26	48	36	42	101	77	105
Burma	1			1	..	..	34	28	37	69	80	76
Central Provinces	21	9	9	33	27	26	56	38	42	137	98	105
Coorg	6	4	5	3	5	6	22	15	26	153	119	174
Madras	2	3	4	7	11	14	22	18	17	119	104	126
N.-W. F. and Punjab	3	6	4	10	19	15	38	47	36	59	89	68
United Provinces	22	15	13	43	48	35	46	45	51	73	69	78
Baroda State	87	40	34	113	68	72	103	36	43	172	89	110
Central India Agency	25	..		51		..	77			138	..	
Cochin State . . . . .	..	..	..	1	3	..	23	10		92	64	
Hyderabad State	20	12	27	42	40	57	32	21	35	106	98	134
Kashmir State	7	..	..	20	..	..	31	..	..	52		..
Mysore State	1	2	2	5	9	9	26	18	31	100	106	174
Rajputana Agency	18	..		28	..		61			113		..
Travancore State	1	3		2	4	..	30	12	..	72	43	..

NOTE.—The 1881 figures are omitted in the case of Central India and Rajputana as they refer only to a small and by no means representative section of the population. The proportions for the Punjab in 1891 were disturbed by the way in which the age return was tabulated as explained in the Chapter on Age.

SUBSIDIARY TABLES.

SUBSIDIARY TABLE VI.

Proportions of the Sexes by Civil condition for Religions and Main Provinces and States.

1	NUMBER OF FEMALES PER 1,000 MALES														
	AT ALL AGES			0-10			10-15			15-20			20 AND OVER		
	Unmarried.	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
INDIA.															
All religions	674	1,011	3,193	952	2,582	2,684	536	2,593	2,447	211	1,184	2,759	270	511	3,426
Hindu	656	1,008	3,205	949	2,464	2,515	507	2,428	2,360	176	1,165	2,810	213	510	3,428
Buddhist	915	1,007	2,649	1,020	1,816	1,889	929	2,469	3,887	729	1,223	2,234	950	723	2,803
Musalman	671	1,021	3,406	945	3,707	3,972	519	3,712	3,340	177	1,235	2,779	295	467	3,694
Christian	758	977	3,360	1,018	2,572	3,132	826	3,751	3,675	321	1,250	3,076	619	502	3,464
Animists	836	1,031	2,833	1,019	1,534	2,589	776	2,076	1,986	466	1,237	2,176	700	591	3,380
BENGAL.															
All religions	665	1,001	4,893	910	2,621	3,884	391	2,955	3,947	126	1,149	4,742	284	415	5,000
Hindu	647	986	4,514	953	2,272	3,399	384	2,413	3,483	119	1,115	4,612	222	447	4,502
Buddhist	776	1,019	3,752	971	1,406	3,250	790	4,193	3,000	386	1,290	3,422	430	586	3,884
Musalman	667	1,029	6,275	962	5,189	7,185	349	5,337	6,407	82	1,208	5,172	498	335	6,859
Animists	870	1,032	4,620	1,027	2,095	5,982	748	2,637	4,902	528	1,240	3,769	1,122	571	5,059
BENGAL PROPER.															
All religions	611	971	5,642	952	8,715	10,030	293	7,564	12,178	63	1,127	6,294	177	297	5,299
Hindu	551	919	5,187	939	11,140	10,908	230	8,245	17,261	47	1,046	7,067	104	288	4,440
Musalman	656	1,020	6,529	959	7,290	9,206	330	7,063	8,172	66	1,149	5,294	407	299	7,163
BIHAR.															
All religions	725	1,033	3,869	944	1,741	2,671	473	1,473	1,955	207	1,155	3,101	385	584	4,438
Hindu	715	1,025	3,685	935	1,696	2,575	456	1,398	1,827	194	1,137	2,916	341	591	4,265
Musalman	738	1,035	5,274	972	2,472	4,088	469	2,196	3,477	197	1,273	4,625	864	533	5,674
BOMBAY.															
All religions	650	1,004	2,746	933	3,183	2,306	489	2,681	2,392	187	1,113	2,180	364	508	3,145
Hindu	651	1,011	2,836	936	3,270	2,314	452	2,818	2,335	168	1,109	2,231	390	498	3,294
Musalman	649	980	2,308	913	2,249	1,942	618	1,766	2,657	227	1,187	1,815	332	559	2,576
BURMA.															
All religions	869	933	2,468	1,016	1,350	1,500	913	2,327	3,776	636	1,107	1,975	817	686	2,867
Hindu	172	218	516	867	902	.	357	989	1,133	42	233	317	57	136	700
Buddhist	919	1,009	2,637	1,021	2,480	2,000	933	2,497	4,555	738	1,224	2,238	962	726	2,782
Musalman	543	472	1,279	956	893	..	623	3,070	4,273	178	535	798	283	298	1,677

SUBSIDIARY TABLE VI—concl'd.

Proportions of the Sexes by Civil condition for Religions and Main Provinces and States—concl'd.

1	NUMBER OF FEMALES PER 1,000 MALES														
	AT ALL AGES			0-10			10-15			15-40			40 AND OVER		
	Unmarried.	Married.	Widowed	Unmarried	Married	Widowed	Unmarried.	Married.	Widowed	Unmarried	Married	Widowed	Unmarried	Married	Widowed
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
CENTRAL PROVINCES.															
All religions . . .	771	1,040	2,966	993	2,123	2,166	648	1,956	1,766	295	1,169	2,172	401	600	3,616
Hindu . . .	764	1,087	2,997	987	2,261	2,254	613	1,977	1,803	270	1,154	2,139	388	595	3,697
Musalman . . .	709	958	2,992	967	1,519	1,700	722	1,983	1,457	269	1,127	2,250	317	566	3,535
Animists . . .	822	1,080	2,816	1,034	1,177	1,868	812	1,715	1,523	355	1,277	2,314	554	643	3,253
MADRAS.															
All religions . . .	725	1,056	5,034	1,008	5,332	6,507	708	6,633	9,439	216	1,449	5,686	421	444	4,858
Hindu . . .	720	1,054	5,053	1,003	5,549	6,638	694	6,554	9,471	206	1,410	5,778	398	444	4,821
Musalman . . .	738	1,101	6,228	992	3,033	5,556	786	11,704	15,854	226	1,606	6,056	850	423	6,278
PUNJAB.															
All religions . . .	604	1,022	1,863	884	2,859	1,773	595	2,496	1,898	158	1,250	1,423	60	586	2,028
Hindu . . .	557	1,013	1,848	880	2,879	2,021	524	2,285	1,418	81	1,189	1,479	20	570	1,998
Musalman . . .	657	1,034	1,928	904	2,879	1,597	656	2,812	1,421	222	1,309	1,398	135	589	2,119
UNITED PROVINCES.															
All religions . . .	642	1,011	2,399	927	1,829	1,473	476	1,823	1,434	149	1,129	1,815	169	608	2,683
Hindu . . .	633	1,008	2,410	924	1,818	1,419	458	1,800	1,457	136	1,119	1,860	146	606	2,680
Musalman . . .	698	1,031	2,370	944	1,925	2,224	568	2,026	1,294	225	1,196	1,522	351	615	2,757
HYDERABAD.															
All religions . . .	655	984	3,478	905	3,817	3,515	388	3,494	3,605	339	1,109	3,203	583	449	3,631
Hindu . . .	651	985	3,456	891	3,953	3,522	356	3,474	2,734	300	1,091	3,214	598	451	3,598
Musalman . . .	689	979	3,780	1,024	2,214	3,956	628	4,112	5,221	244	1,293	3,168	491	433	4,031

CHAPTER X.

Age.

746. The age distribution of the population for each year of life up to 5 and then for quinquennial periods up to 60, with a single head for persons aged 60 and over, is given in Imperial Table VII, where the figures are exhibited in conjunction with religion and civil condition. In Table XII the persons returned as suffering from the four infirmities dealt with at the Census are classified

Reference to
Statistics

0—5
5—12
12—15
15—20
20—40
40 and over.

according to the same age periods; in Table XIV the ages of certain selected castes are exhibited according to the periods noted in the margin, in combination with the statistics of civil condition, and in Table VIII, the prevalence of literacy is shown for the total population and for each

religion at the age periods '0—10', '10—15', '15—20' and '20 and over'.* These age statistics have already been dealt with, so far as they tend to throw light on the proportions of the sexes, the marriage customs of the people, the degree of education they enjoy, and their liability at different periods of life, to the infirmities above referred to, in the special Chapters devoted to these subjects, and in the present Chapter the discussion will be confined to a consideration of the information to be derived from them regarding the longevity and fecundity of the people and of the changes which have occurred in their age distribution since the previous census with the reasons for the same.

This aspect of the subject is illustrated in the following subsidiary tables at the end of the Chapter:—

- I.—Age distribution of 10,000 of each sex for India and the larger provinces.
- II.—Age distribution of 10,000 of each sex by religion.
- III.—Death-rate at certain ages in 1897 and 1900.
- IV.—Proportion of children under 10, and of persons over 50, to those aged 20—40.
- V.—Variation in population at certain ages since 1881.

747. The inaccuracy of the age return has frequently been dilated on. Even in England it was stated in the Census Report for 1891 that "not improbably the greater number of adults do not know their precise age and can only state it approximately." Amongst adults, says a leading statistician, "there is a great tendency to return ages at some exact multiple of 10" while in the case of children under 5 years of age, "the vagueness with which parents use the terms 'one year old' 'two years old', etc., when the children are only in their first or second year, respectively, is a cause of considerable error."† There is also a wilful mis-statement of age on the part of women, while there is a marked tendency for old persons to overstate their ages.

Inaccuracy
of the age
return

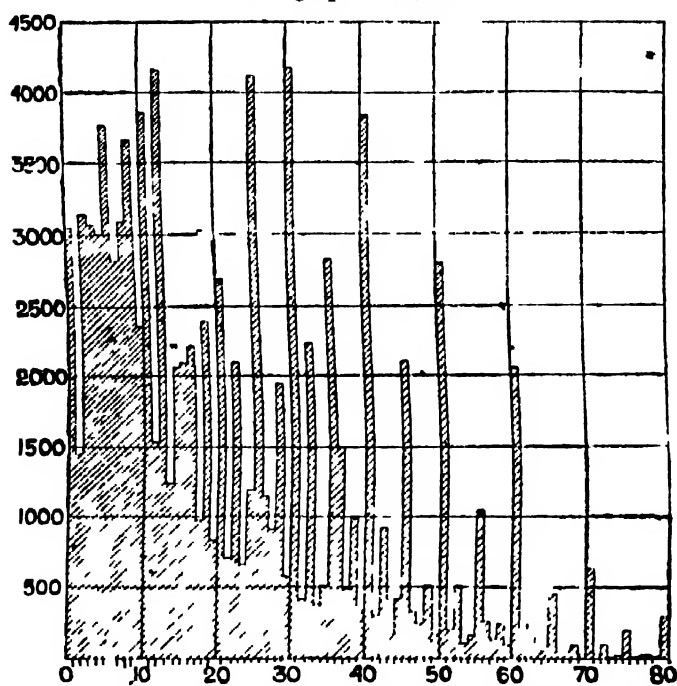
If the age return is thus inaccurate in England it is infinitely more so in India. Nothing is more common when a witness is asked his age in court than for him to reply *bis challis* 'twenty to forty,' or to say that he has not the faintest idea. The enumerators were almost as ignorant on this subject as the enumerated, and it must be confessed that the entries made in the schedules were often little better than very wild guesses. The tendency to select certain round numbers is far greater than it is in England, and the inaccuracy of the entries for children under 5 years of age is still more marked. It will be seen from

* By '0—10' is meant the period from birth up to, but not including, the age of 10 (completed years), '10—15' includes those who have completed the tenth but not the fifteenth year of their age, and so on.

† Dr Newsholme, in the third edition of his book on Vital Statistics, page 2

the diagram in the margin which has been prepared from a special table

Diagram showing the actual number of males returned at each age per 100,000



NOTE.—The figures at the bottom indicate the age and those at the side the number of persons returned at it

showing the actual ages returned in Bengal by about half a million persons* that the children shown as 5 years of age are considerably more than twice as numerous as those of 1 year, but that they are, in their turn, exceeded by the number of males returned at the ages of 10, 12, 25, 30 and 40. In a progressive or stationary population, however, the greatest number should be at the age "under 1 year" and it should steadily decrease from year to year. That it does not do so is due mainly to the tendency, already alluded to as existing even in Europe, to fix on certain favourite numbers, which are, for the most part, multiples of 5; the most popular numbers of all are apparently 12, 25, 30 and 40.

Its utility

748. In view of these irregularities, and of the obvious errors in the return to which they point, it may be asked whether anything is to be gained from a detailed consideration of it. The answer is that in a country like India, where the vital statistics are still so imperfect and the other data on which to base an estimate of the mean duration of life and of the true birth-and death-rates are so uncertain, we cannot afford to neglect any source from which a fair approximation to the actual facts may be deduced; that in a huge population like that of India, the errors due to under-and over-statement of age tend to cancel one another, while the plumping on certain favourite numbers can be eliminated by a careful process of smoothing or adjustment, and, lastly, that the degree of error from census to census may be assumed to be constant, and the collation of the results for successive enumerations thus not only affords a check on the calculations and a means of gauging the extent to which the returns are vitiated by a tendency to exaggerate or understate age, either generally or at particular periods of life, but also brings to light any considerable alteration in the age distribution which may have taken place owing to famine or other disturbing causes. The examination of the age statistics has been undertaken by Mr. G. F. Hardy, F.I.A., F.S.S., who dealt with this subject both in 1881 and 1891, and for the detailed conclusions to be drawn from them, his report, which unfortunately is not yet ready, must be awaited.† In the present Chapter, I shall deal only with some of the more obvious features of the statistics, based on a comparison of the age proportions for different provinces and religions at the present census and in 1891.

Some explanations of the figures

749. Before proceeding to do so, however, it is desirable to notice a few general points connected with the return. In 1881 the enumerators were instructed to enter the number of years which each person had completed and the same instruction was repeated at the next census, except in the Punjab, where it had been ascertained that the people usually refer to the current year of their age and it was thought that more accurate statistics would be obtained if the latter were entered in the schedules. The instructions in that province were modified accordingly but, in order to preserve uniformity with other parts of India, the return was adjusted in the course of tabulation by deducting one year from each person's age. The consequence was that the relative proportions of the quinquennial periods were thrown into disorder "because owing to the habit of plumping on the multiples of 5, all the undue excess got shifted back a period. That is,

* Similar statements were prepared in other provinces also, but it is better, in this connection, to take the proportions for a single province, as the numbers which the people have a *penchant* for are not the same in all parts of India. Even in the same province and in neighbouring districts there are marked local peculiarities, as will be seen from page 191 of the Census Report for the Punjab and from the first foot-note on page 211 of the Report for Bengal.

† This report will be published hereafter in a supplement to the present volume.

the return of those at 40 years appeared under the heading of 39 and so on." At the present census, therefore, the rule of 1881 was reverted to, and the enumerators were told, in the Punjab as elsewhere, to "enter the number of years which each person has completed." It may be noted, in this connection, that the propensity to return the current and not the completed year of a person's age is not by any means confined to the Punjab. It is frequent, though not universal, in Bengal and Madras and probably in other provinces as well,* and the extent to which this tendency was counteracted at the census would depend on the care taken to drill the enumerators and explain the meaning of the rule. There is also, at certain ages, a general bias in favour of minimising or exaggerating age, quite apart from the fondness for certain round numbers already alluded to. Amongst men approaching middle age, and especially amongst widowers, there is frequently a desire to be considered young, and it is not at all uncommon for persons of 35 or even 40 to describe themselves as 25 years of age; the number of persons returned at the age period '25—30' at the present census thus exceeds by more than 7 per cent. the number at '15—20' ten years ago,† and by $1\frac{1}{2}$ per cent. the number entered at the latter period at the present census. With females the proneness to misstatement comes earlier. It is considered disgraceful for a girl to attain puberty while still unmarried, and when this happens, her true age will not be reported. It is for this reason that while females aged '0—5' invariably outnumber the males, at the age-period '10—15' they are in great defect. Once a woman is married, her age is often exaggerated while she is still very young, but the estimate then remains unchanged so long as she is capable of child-bearing, and until this period of life has passed, she is often shown as much younger than she really is. Amongst old people of both sexes, but especially in the case of females, exaggeration in the matter of age is very common. As regards the great irregularities at the return of ages under 5 which are disclosed by the diagram in the margin of paragraph 747, the following extract is quoted from the Bengal report, not so much because it supplies a general explanation of the fluctuations as because it affords some insight into the mental attitude of the native of India in the matter —

"The very small number returned as 1 year of age appears to be due in part to the rule that children under 1 year of age should be entered as 'infants'. The object of this provision was to avoid the confusion between months and years which would arise if the ages of such children were stated in months. This source of error was probably obviated, but on the other hand, many older children who were still unweaned and were, therefore, popularly regarded as infants, were shown as such in the census schedules and were accordingly classed as 'under 1 year of age' in the course of tabulation. But the main reason appears to be that it is the usual practice to count the current year as part of a person's age. This has been proved to be the case in the Punjab, and the enquiries I have made indicate that it is usually so in Bengal also. In the earlier years of life, however, the tendency is checked to some extent by the use of the terms *derh*, 'one and a half,' and *arhai* 'two and a half.' As soon as a child ceases to be classed as an infant he is described as '*derh baras*,' or one and a half years of age, and the enumerator would enter him as 1. When he has completed 18 months or so, he will be called two years old until he passes the age of two, when he will be described as '*arhai baras*,' or two and a half, which will be taken by the enumerator to mean 2 years. The age return for 'two years' will thus include all children from $1\frac{1}{2}$ to $2\frac{1}{2}$. After $2\frac{1}{2}$ years a child will ordinarily be called 3 till he has passed his third birthday. There is no word denoting $3\frac{1}{2}$ or other similar fractions, so that according to the general system of counting the current year, the tendency would then be to call him 4, and so on for the higher ages.

"So far as these considerations go, it would seem that the word 'infant' will include all children under one year of age, and also some over that age who are still at the mother's breast, that the year 1 will include such children between the ages of 1 and $1\frac{1}{2}$ as are not classed as 'infants' and also possibly some children under 1 year of age who should under the rules have been entered as 'infant', the year 2, all children from about $1\frac{1}{2}$ to about $2\frac{1}{2}$ years of age, and the year 3 those from $2\frac{1}{2}$ to 3, while from 4 onwards, the age actually returned will be a year in excess of the actual fact, so that the return for the years 0—5 will include only those who have not completed their 4th year, while that for 5—10 will include all who have completed their 4th, but, have not completed the 10th year of their age. There are, however, other complications. * * *

750. Lastly there is the disturbing effect of migration. The emigrants are in most cases adults. Consequently their departure, so far as it is not counteracted

Migration

* It exists also in England and it has been suggested that more accurate results would be obtained if it were recognized at the census (Journal of the Institute of Actuaries for 1900, page 358)

† In Bengal where this proclivity is most marked the excess amounts, to 15 per cent. In the Punjab, says M¹ Rose, there is a feeling that it is luckier to understate one's age than to exaggerate it

by a corresponding influx from other parts, raises the proportion of children and reduces the mean age of the population in the tracts from which they go, and has the opposite effect on that of the places in which they settle. In the larger units the proportions are not, as a rule, greatly affected by migration, though the emigration of 1½ million persons from the United Provinces must have left its mark on the figures, but it is very noticeable in the case of the smaller provinces, such as Assam, which, with a population only slightly exceeding 6 millions, has 776,000 immigrants, or Burma, which includes 475,000 foreigners in its population of 10½ millions. It would be convenient in such cases at the next census to tabulate immigrants according to age,* so that they may be replaced in their province of birth for the purpose of these statistics.

Factors affecting age distribution

751. The age distribution of the people shows great variations in different provinces and even in the same province at different enumerations. In India as a whole, for example, the proportion of male children under 5 per 10,000 males rose from 1,318 in 1881 to 1,409 in 1891 and has now fallen to 1,254. In Bengal the proportion at the present census is 1,327 compared with only 1,148 in Bombay. These proportions depend on three factors, the normal longevity and fecundity of the people, i.e., the normal birth- and death-rates, and the occurrence or otherwise of special calamities, such as famine or war, which disturb the normal age distribution. The natural birth- and death-rates are determined by various factors not easily gauged, but it may safely be assumed that they change but slowly, and that marked differences occurring after short intervals of ten years must be due to the influence, past or present, of some special calamity, i.e., in the case of India, of famine. The effect of such a calamity on the age distribution is far reaching and before entering upon a discussion of the actual statistics it is desirable to consider it in some detail.

PROVINCES	NUMBERS OF MALES UNDER 5 PER 10 (00)		
	1801	1891	1891
India	1,254	1,409	1,318
Bengal	1,327	1,303	1,430
United Provinces	1,228	1,308	1,228
Madras	1,339	1,482	1,247
Bombay	1,118	1,437	1,264
Punjab	1,257	1,620	1,229
Central Provinces	1,276	1,449	1,557

NOTE.—The high figure for the Punjab in 1891 is due to the shifting back of the ages to allow for the entry of the current instead of the completed year of age in the schedule.

Famine

752. When a tract is afflicted by famine the mortality rises in a greater or less degree according to the severity and duration of the calamity and the effectiveness of the measure taken to mitigate it. All sections of the population, however, are not equally affected; the very old and the very young suffer most while those in the prime of life sustain only a comparatively small diminution in their numbers. This will be seen from subsidiary table III showing for certain provinces the reported death-rate at each age in the famine years and the death-rate in India at large in 1898. Consequently at the close of a famine the population consists of an unusually small proportion of children and old persons and of a very large proportion of persons in the prime of life, i.e., at the reproductive ages. For some years, therefore, in the absence of any fresh calamity, the growth of the population is very rapid. The number of persons capable of adding to the population not having been much affected, the actual number of births is very little less than before the famine,† but the proportion calculated on the diminished population is much greater, and so too is the excess of births over deaths, as the latter are much below the average in a population consisting of an unusually large proportion of healthy persons in their prime, and of a comparatively small proportion of persons who by reason of youth, old age, or infirmity have a relatively short expectation of life. This more rapid rate of growth continues for some years, but then, as the persons who, at the time of the famine, were in their prime, pass into old age and their place is taken by the generation born shortly before the famine with its numbers greatly reduced by the mortality which then occurred, the birth-rate falls, not only below that of the years following the famine, but also below the

* This would present no difficulty under the slip system. It would seem desirable to prepare a second slip for immigrants, as this would enable their caste, birth-place and occupation, as well as their age, to be worked out without disturbing the arrangement of slip for the general tables. It is not proposed that all immigrants should be thus dealt with but only those that are of importance either locally or in respect of their province of origin.

† It is often even greater, owing partly to the temporary suspension of reproductive activity during the famine which is followed by a reaction as soon as it is over, and partly to the disappearance of all preventive checks in families which have lost many of their members.

average. The disturbance of normal conditions is still not ended, and the pendulum continues to swing backwards and forwards between periods of high and low birth-rate, but its oscillations gradually become fainter until they cease from natural causes to be apparent or, as more often happens, until some fresh calamity obliterates them. For the present discussion it will suffice to notice the three main stages, *viz.*, (1) a very small proportion of young and old persons immediately after a famine, (2) a high birth-rate during the years immediately succeeding the famine which raises the proportion of children and reduces the mean age of the living, and lastly (3) an unusually small proportion of persons of child-bearing age about 10 to 15 years after the famine which reduces the birth-rate and consequently the proportion of children.

Thus we find that in Madras, which suffered from the famine of 1876—78, the number per 10,000 males who were under 5 years of age was only 1,247 in 1881, but in 1891, *i. e.*, after a period of recovery, it had risen to 1,482, and this has been followed at the present census by a fall to 1,339; the conditions of the last decade have not been favourable to a rapid growth of the population, but it cannot be said that the scarcities which occurred in Madras were sufficiently severe to cause an appreciable increase in the mortality, and the reduction in the proportion of children which has taken place seems, therefore, to be, if one may so describe it, an after-math of the famine of 1876—78. Bombay, which also suffered from the same famine, had an almost equally small proportion of male children in 1881 and an almost equally high one in 1891, but now, owing to the famines of 1897 and 1900, the proportion has fallen to 1,148 per 10,000—the smallest returned in any of the larger British Provinces.* In 1881 the Central Provinces was still growing with unusual rapidity after the famine of 1869, with the natural consequence that, in spite of favourable conditions during the next decade, the proportion of young children in 1891 showed a considerable decline. The further sharp fall at the present census is of course a direct outcome of the succession of bad years which preceded it.

753. Another way of viewing the effect of famine is by comparing the number of persons returned at each age period at different enumerations. The population of the Central Provinces grew by 12·1 per cent between 1881 and 1891 and the only marked divergence from this general rate of growth was an increment of 23 per cent. in the age period '10—15' which in 1891 corresponded to the inflated period '0—5' of 1881 when the population was still recovering from the famine of 1869, whereas the population aged '10—15' in 1881 corresponded to that aged '0—5' in 1871, which was exceptionally small owing to the mortality that occurred amongst children in the course of the same famine. At the present census the general population of the Central Provinces shows a diminution of 8·3 per cent.; there has been a decrease of 30 per cent. amongst persons over 60 years of age, of 20·6 per cent. amongst those under 10, and of 3·5 amongst those between 40 and 60; at '10—15' on the other hand there is a gain of 1·3, and at '15—40', of 0·4 per cent. It thus appears that the whole loss of population has occurred amongst people who had passed the reproductive time of life or who had not yet reached it. It may, therefore, be concluded with confidence that the recuperation will be rapid and that, in the absence of any fresh check on the growth of population, the losses of the last decade will have been repaired before the time comes for taking the next census, though their effect will be felt in a diminished rate of growth later on when those who are now young children reach maturity.

754. The Bombay Presidency was more severely affected by famine in the decade preceding the census of 1881 than the Central Provinces and the age distribution in 1891 thus differed more from the normal. At the present census there has been a decrease of 5·5 per cent. at all ages taken together; at '0—10' and '60 and over' the falling off amounts to 15·2 and 17·4 per cent, respectively; there is an increase of 19·8 per cent. at '10—15', but a decrease of 4·1 per cent. at '15—40'. The proportion of persons aged '5—30' in 1891 was less by 3 per cent. than it had been ten years previously and the apparent decline at the present census as compared with 1891 in the number of persons aged '15—40' (*i. e.*, in the same two groups ten years later) is, therefore, due not so

* In Gujarat alone the proportion was only 914 compared with 877 in Rajputana and 963 in Baroda. Mr. Enthoven shows that the proportion of children in famine districts is much lower than in Sind and other tracts that were not affected by crop failure. So also in the Punjab the proportion of children is very low in Hissar, Rohtak and Jhelum.

much to a higher mortality amongst the persons concerned during the decade 1891—1901 as to the fact that at its commencement they were already in a minority as compared with the corresponding group at the previous census. Similarly, the large increase at the present census in the number aged '10—15' is due mainly to the circumstance that the proportion of children aged '0—5' in 1891 exceeded by 14 per cent. the corresponding proportion in 1881.

Other Pro
vinces

755. The variations in Berar correspond very closely to those noticed in the Central Provinces. In Bengal the diminished growth is mainly accounted for by a fall at '0—10' and '60 and over'; at '15—40' the proportional increase is greater than the previous decade. The relatively small increase at the latter period in Madras is a reminiscence of the great famine of 1877-78. The diminished rate of growth in the United Provinces is accounted for by a falling off in the number of persons enumerated at the two extremes of life—under 10 and over 60—*i.e.*, it is due to the prevalence of famine. In Baroda, Rajputana and Central India the loss of population at the reproductive ages is much more serious than in British territory and it seems probable, therefore, that the recovery will be less rapid.

The mean
age of the
people

756. It will be seen from the preceding paragraphs that famine has such a great and far reaching influence on the age distribution that it is impossible without very elaborate calculations based on an examination of the figures for a number of enumerations to ascertain with even approximate accuracy the normal proportions and the natural fecundity and longevity of the people. In subsidiary tables I and II the mean age at the last three enumerations has been worked out roughly from the number shown as living at each age period, in the manner described in the Report on the Census of France in 1891,* after eliminating the irregularities in the age return due to the plumping on certain favourite numbers by an arithmetical process of smoothing known as "Bloxam's method." It should be clearly understood that no pretence is made to absolute accuracy, and no attempt has been made to allow for errors other than those due to a fondness for round numbers, *e.g.*, to a tendency to understate or exaggerate age, but it is believed that whatever error may attach to the method is fairly uniform for the various sets of figures dealt with, and will not, therefore, vitiate comparison between different provinces, religions and enumerations. It should be explained that 'mean age,' as here calculated, refers to the average age of the persons enumerated at the census, *i.e.*, to the mean age of the living, and does not coincide with the mean duration of life or the expectation of life at birth, the figure largely depends on the relation between the birth- and death-rates and, in a growing population with a large proportion of children, the mean age of the living will be less than in a decadent one where the children are few in number, even though there is no difference in the average longevity of the individuals who compose the two communities† A low mean age may mean either that the population is very prolific and contains a large proportion of children or that the adults die at a comparatively early age, while a high one may connote either a relatively long span of life, or else a very low birth-rate, or a high infantile mortality. The mean age again is very little affected by famine which reduces the population at the two extremes of life and touches but slightly those at the middle ages. Some guidance as to the causes affecting the result may be obtained from a comparison of the age distribution and of the proportion borne by the young and old to those in the prime of life, but here again we are confronted with the difficulty, already explained, that the age distribution is liable to be greatly disturbed by famine and does not recover its normal condition for several generations. Lastly, there is the disturbing influence of migration to which allusion has already been made.

Variation in
mean age
since 1881

757. With all this ambiguity the subject is beset with pitfalls, and in the quest after positive conclusions it is necessary to tread very cautiously. I shall, therefore, attempt to point out only the most general deductions which the return seems to indicate, and in doing so shall take only the figures for

* *Resultats Statistiques du Dénombrement de 1891*, Paris 1894, pages 223, 224 and 414. The method in question is as follows—The totals, showing the number of persons living at each quinquennial period have been multiplied by 5 and raised by $2\frac{1}{2}$ times the total number of persons dealt with, and the sum thus obtained has then been divided by the number of persons.

† In illustration of the above remarks it may be mentioned that in France during the period 1840—49 when the population was growing rapidly, the mean expectation of life at birth was 40.05 years, whereas the mean age of the living was only 30.92.

males, which suffer less from the general inaccuracy of the return than those for the other sex.* The mean

Province, &c.	Mean age of males in years		
	1801.	1891.	1881
India.	24.7	24.4	24.5
Bengal	24.3	24.0	24.2
Bombay	24.3	24.3	24.2
Madras	24.7	24.7	24.6
Punjab	25.3	23.1	25.3
United Provinces .	25.2	25.0	25.0

Note.—The low figure for the Punjab in 1891 is due to the manner in which the age statistics were collected and tabulated as explained in paragraph 749

ages of males worked out, in the manner already indicated, for India as a whole and for the five largest provinces at the last three enumerations, are noted in the margin. In India as a whole, the mean age of the living has risen slightly since 1891, but this result is due mainly to a diminution in the number of births and a higher rate of mortality amongst children, and in every 10,000 males there are now only 2,648 children compared with 2,837 in

1891. If we compare the proportion of children (both sexes) under 10 and of persons over 50 to 100 persons, aged 20—40 (subsidiary table IV) it appears that while the former has fallen from 91 to 85 the latter has risen from 34 to 35. This would at first sight lead to the conclusion that in spite of the famines the general proportion of old people has been maintained, but this is not really the case. The result is due largely to the change of system in dealing with the age return in the Punjab, where the proportion of persons over 50 was unduly reduced in 1891, coupled with a rise in the proportions for Madras and Mysore which were not much affected by the famines of the past decade, but which suffered severely in that of 1877-78; at that time the persons now over 50 were at the ages least susceptible to famine losses, whereas the present group '20—40' includes the group '0—10' of the census of 1881, which was greatly reduced in number by the calamity in question. In the same way, a rise would probably have taken place in the proportion of persons aged 50 and upwards in Bombay, but for the losses in the recent famines in that Presidency, the full influence of which on the age distribution has thus been obscured. In Bengal the slight rise in the mean age is attributable partly to a diminution in the proportion of children under 10 (from 2,949 to 2,848 per 10,000), chiefly in East Bengal, where several districts were recovering in 1891 from the effects of a disastrous cyclone and storm wave, and Chota Nagpur, where the number was reduced by famine in 1900, and partly to an increase in the proportion of persons aged '20—40,' which may perhaps be ascribed to immigration. The mean age in Madras and Bombay remains unchanged as compared with 1891, and that in the Punjab, though very different from the figure for that census, when the return was dislocated by the method of tabulation adopted, is the same as it was 20 years ago. The slight increase in the mean age in the United Provinces seems attributable to a reduction in the proportion of children under 10 years of age.

758. The mean age of the living in the Punjab and the United Provinces exceeds the Madras figure by about six months, and the latter again is nearly five months in excess of that of Bengal and Bombay. So far as the Punjab is concerned, the result may, perhaps, be taken to indicate greater longevity; the proportion of children under 10 years of age to persons aged 20—40, is fairly high, while that of persons over 50 is equalled only in Madras, where, as already shown, the result for the present census is due to the famine of 1877-78 and the corresponding proportion in 1891 was considerably lower than the present figure for the Punjab. In the United Provinces, on the other hand, a comparatively low proportion of children seems to be the main reason for the high average age of the living.

Variation by
(1) Locality

759. Of the three religions noted in the margin, the Hindus have the highest (11) Religion.

Religion.	Mean age of males in years		
	1901	1891	1881
Hindu	24.0	24.6	24.6
Musalman	24.1	23.7	24.3
Animist	23.2	22.8	...

mean age and the Animists the lowest. The last mentioned are very prolific and the proportion of children under 10 is higher than in any other section of the population; they suffered severely in the recent famine years, but in 1891 no less than 3,262 in every 10,000 males were under the age of 10 compared with 3,060 and 2,767

in the case of Muhammadans and Hindus respectively. They are also relatively short-lived and in the same year only 908 males per 10,000 were over 50 years of age against 1,006 amongst Muhammadans and 1,066 amongst Hindus. The smaller proportion at the higher ages amongst Muhammadans, as compared with Hindus, is due to the fact that children bulk more largely in the total population; if children under 10 be excluded, i.e., if the proportion of persons over 50 be calculated on 10,000 persons, aged 10 and upwards, the figure for Muhammadans is 1,485 compared with 1,468 for Hindus, and it is thus clear that in their case the lower mean age is due solely to the greater number of children amongst them, and that they are in no way inferior to the Hindus in point of longevity.

(ii) Caste.

760. In the Bengal report the relative longevity of the different castes has been discussed, and the conclusion arrived at is that on the whole the higher castes enjoy a longer span of life than those of lower status :—

“The proportional age-distribution of some of the main castes will be found in subsidiary table IV. It would be tedious to discuss the figures

Caste or Tribe.	Number of male children under 5 per 1,000 population
Bráhmaṇ . . .	119
Káyaśīh . . .	126
Rájput . . .	115
Bábhān . . .	112
Hó . . .	141
Oráon . . .	145
Santál . . .	145
Pán . . .	156
Bhuiyá . . .	147
Bhumij . . .	128
Munda . . .	153

at length, but, taking males only, a few interesting results may be briefly noticed. Excluding Baishnabs, where the proportion is disturbed by new accretions of adults from outside, the castes which have the largest number of persons per 1,000 over 40 years of age are those which rank highest in the Hindu social system, viz., Bráhmans (225), Káyaśīhs (224), Rájputs (220), and Bábhāns (217). Conversely the communities with the smallest proportion of persons of this age are the aboriginal tribes of Chota Nagpur, such as Ho (156), Oráon (159), Santál (171), Pán (174), Bhuiyá (175), Bhumij (180), and Munda (183). These proportions are determined, as already explained, not only by the relative longevity of the various groups but also by their fecundity. Where the proportion of children is large that of adults must necessarily be smaller,

and the average age of the community will be less, even if the actual duration of life be the same. Amongst the high castes the proportion of children is much smaller than it is amongst the aboriginal tribes.

“It is interesting to notice the very close resemblance which the age distribution of the

Age.	Proportion per 1,000	
	Rájbañsi	Chandál.
0—5 . . .	183	181
5—12 . . .	199	200
12—20 . . .	160	158
20—40 . . .	301	303
40 and over . . .	207	208

Chandál of East Bengal bears to that of the Rájbañsi, and it would seem that the likeness must be due to something more than mere accident. It is possible that a more extended study of the age statistics of the various castes would throw a good deal of light on their racial affinities. The low proportion of old men amongst the Gaudias of the Orissa States, for example, points clearly to the non-Aryan sources from which the caste is there mainly recruited, while the corresponding figure for the Bábhāns of Hazaribagh suggests either that they have there intermixed with lower races, or else that, in

compiling the figures, there has been some confusion between Bhumihár used as a synonym for Bábhān and the same word employed as a title of Mundas and Oráons, or as referring to the tribe commonly known as Bhuiyá. The Telis and Lohárs of the Chota Nagpur Plateau present in their age distribution the characteristics of the aborigines around them, while the same castes in Bengal proper resemble in this respect the higher rather than the lower classes of the community.”

The main ethnic difference between the high and the low castes of Bengal is that the former have a stronger infusion of Aryan blood,* while the latter are more closely related to the Animistic tribes. The greater longevity of the high castes coupled with the same feature in the case of the people of the Punjab, where the Aryan element is most marked, seems to suggest the general conclusion that the expectation of life is greatest where the Aryan strain is strongest and shortest where it is most completely replaced by the Dravidian.

761. The calculation from the age statistics recorded at the census of the actual birth- and death-rates is a most difficult operation, and for definite conclusions on this point the result of Mr. Hardy's investigations must be awaited. It may, however, be mentioned here that, in the absence of any change in social or material conditions, the birth-rate depends primarily on the number of married women of child-bearing age, i.e., at the ages from 15 to 40, and we have seen

The birth-
and death-
rates

* By Aryan is here meant the

the Sanskritic languages to India.

that the proportion which people of these ages bear to the population at large varies greatly at different times, so that the crude birth-rate, or number of births per 1,000 of the total population will also vary greatly, and will be highest in the years of recovery from a severe famine which has swept away a large proportion of the persons at the non-productive ages. The mean age of the living (both sexes) at the present census is 24·9. If the population had been stationary for a generation, and if there had been no calamities, such as famine, to disturb the age distribution, this would correspond fairly closely to the mean duration of life. The population, however, is growing (except for famine losses which, as noted above, do not greatly affect the mean age) and the mean duration of life is therefore greater than the mean age of the living. We have seen, moreover, that the ages at the census are, on the whole, somewhat understated, and a further increase must be allowed on this account. The true mean duration of life is probably not less than 26 years. This would give a death-rate of $\frac{1,000}{26}$ or 38·4 per mille per annum, and if the normal rate of growth of the population be taken at 6 per mille per annum (except for the plague it might be expected to exceed this during the next decade), the corresponding birth-rate would be 44·4 per mille. This, however, is little better than mere guessing and, in the circumstances, it is useless to go further and discuss the probable figures for different provinces and religions. It may be mentioned, however, that in certain tracts the *recorded* birth-rate far exceeds the above general estimate, and in one of the districts of East Bengal which has enjoyed a large measure of prosperity, and is inhabited mainly by prolific Muhammadans, it amounted in 1900 to no less than 52·3 per mille, calculated on the population disclosed by the census of the 1st March 1901. The

Province	Estimated Number per mille of		
	Deaths.		Births.
	1891.	1901	1901
India . . . . .	...	39·6	48·8
Madras	44·3	36·0	57·3
Bombay	42·5	35·4	49·3
United Provinces	41·9	37·7	44·2
Bengal	39·9	44·8	51·8
Punjab	39·2	36·0	45·8

birth- and death-rates deduced by Mr. Hardy for some of the main provinces from an examination of the age statistics for 1881 and 1891 are noted in the margin. These, however, are not normal rates, but are based on the actual age distribution found at the time of each census and the ascertained rate of increase during the previous decade, the estimated mortality based on the figures for 1891, *i.e.*, after a decade of recovery from famine losses, was

thus much smaller than that based on those for the previous census which followed a period in which several disastrous famines had occurred. What seems to be needed is an estimate of the normal birth-rate per 1,000 married women of child-bearing age in each province, but it is a question whether the material so far available is sufficient to enable the influence of famine to be discounted.

762. M. Bertillon divides the countries of Europe into three classes with reference to the fecundity of their people. Calculating the number of births per 1,000 women of child-bearing age (which he places at from 15 to 50,) whether married, unmarried or widowed, he says that the first class consists of those with a high birth-rate, *i.e.*, exceeding 150 per mille; then come those with a moderate one, *i.e.*, exceeding 130 per mille; then those with a low birth-rate, *i.e.*, 120 per mille or less. Class I includes the Slav and Teutonic races; Class II England, Scotland, Belgium, Spain, Portugal, Roumania, Norway, and Denmark; and Class III Sweden, Greece, Switzerland, then, a long way behind, Ireland and, last of all, France. In India the corresponding proportion, on the basis of a birth-rate of 44·4 per mille of the total population, would be 180·2. If however we take only the ages 15 to 45, and calculate the proportion on the number of *married* women of these ages, it comes to 247·5 in India compared with 254·9 in England. The different result brought out by a comparison on this basis and that based on the crude birth-rate is due partly to the higher rate of mortality in this country, but the main reason is the universality of marriage. In England the persons at the non-productive ages, *i.e.*, the very young and those past middle age, bulk more largely in the total than they do in India; moreover in England, even at the ages '15—45' only 47 per cent. of the females are married against 78 per cent. in India.

The fact that if the birth-rate be calculated on the number of married women aged '15—45' instead of on the total population, it is found to be higher

in England than in India effectually disposes of the theory that the extremely high crude birth-rate in the latter country is due to the early age at which marriage is effected. We have seen moreover that the classes that are most prolific are those that are least addicted to the practice in question, *i.e.*, the Animistic tribes and the Muhammadans. With the Hindus early marriage is most common in North Bihar and yet, in spite of the ease with which in this tract widows obtain a second husband, it contains one of the least progressive populations in India. It would seem as if early cohabitation and premature maternity tend to exhaust the frame and impair the capacity for further child-bearing, rather than to increase the average number of children per family.

The birth-rate in India is high, but so also is the death-rate and the difference between the two, which is the main consideration, is far less than in European countries, *e.g.*, in England and Wales, where the excess of the birth-rate (28.5 per mille in 1901) over the death-rate (16.9 per mille) is nearly twice as great as it is in India. The population, therefore, in spite of the fact that the generations succeed each other more rapidly, tends to grow at a much less rapid rate here than it does in the west.

Local
Variations

763 The proportion of children under 10 years of age to 100 married females aged '15—40' varies considerably in different parts of India. The proportions for the recent census have been disturbed by the famines, but both now and in 1891, Burma shows by far the largest figure. It was succeeded in 1891 by Assam and the Native States of Bengal and the Central Provinces, and then, at some distance, by the Central Provinces, Bengal and the Punjab. Within the limits of Bengal there were great local variations, and whereas the Chota Nagpur plateau showed a proportion almost equal to that of Burma, and East Bengal followed close on Assam, those for Orissa and Bihar were amongst the lowest in India, being associated in this respect with the United Provinces, Berar, Baroda, Hyderabad and the Madras States. The data are too scanty to enable this question to be analysed satisfactorily, but it may be suggested generally that the variations are due partly to the age at which girls marry in different parts (and it has been conjectured above that early marriage is prejudicial to prolificness), partly to the material condition of the people, which would account for the high proportion of children in Burma and East Bengal, where, moreover, child marriage is rare; partly to the influence of race; and partly to the varying rate of infantile mortality due to climate, customs connected with child-birth,* manner of feeding, and degree of care with which children are brought up, coupled possibly with the existence in some localities of preventive checks, as suggested in the Report for Bengal where this cause has been put forward as an explanation of an apparent decline in the birth-rate in certain tracts:—

"The deliberate avoidance of child-bearing must also be partly responsible. It has more than once been pointed out by Settlement Officers that the size of a landless labourer's family is smaller than that of a cultivator, and there seems to be no reason why this should be the case unless preventive checks of some sort were employed. Mal-nutrition would account for the diminished fecundity of the labouring classes in years of famine or great scarcity, but this by itself would, as a rule, merely postpone conception. A low birth-rate immediately after a famine is usually followed by a period in which the number of births is exceptionally great, and there is no reason to suppose that in ordinary years the conditions under which the labouring classes live are unfavourable to child-bearing. Moreover, the phenomenon is not confined to the labourers. Mr. Stevenson-Moore finds that amongst cultivators also the size of the family varies with the size of the holding. It is a matter of common belief that amongst the tea-garden coolies of Assam means are frequently taken to prevent conception or to procure abortion, and if so, it is not by any means improbable that the poorer classes in Bihar should adopt similar measures to avoid the embarrassment of a large family. Regarding the actual means by which the number of children is kept down, I have no information, but it may be noted that in the districts where there has been a falling off in the proportion of children, the decrease in the number of females is somewhat greater than that in the number of males.

* The methods of the indigenous midwife are sometimes very barbarous, *vide, e.g.*, Bengal Census Report, paragraph 939. In the Lushai Hills, says Mr. Allen, when a woman dies in parturition, the child, even if alive, is buried with her.

SUBSIDIARY TABLE I.

Age distribution of 10,000 of each sex. (India and Main Provinces.)

Age.	1901		1891		1881	
	Male	Female	Male	Female	Male	Female
1.	2.	3.	4.	5.	6.	7.
INDIA.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	266	276	326	347	263	275
1	163	175	173	168	220	237
2	274	297	287	319	242	271
3	276	303	318	354	295	329
4	275	288	305	319	298	307
Total 0-5	1,354	1,339	1,409	1,527	1,416	1,419
5-10	1,394	1,382	1,423	1,396	1,432	1,383
10-15	1,264	1,082	1,139	946	1,214	1,006
15-20	866	835	835	811	811	779
20-25	787	892	802	897	799	905
25-30	879	895	876	904	896	925
30-35	848	851	842	846	885	881
35-40	609	557	613	555	587	527
40-45	649	652	638	626	642	645
45-50	370	339	366	323	344	313
50-55	437	452	411	426	436	464
55-60	177	169	179	170	161	157
60 and over	466	555	462	573	475	591
Mean Age	24.7	25.1	24.4	24.9	24.5	25.2
BENGAL.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	285	291	317	333	232	233
1	138	151	141	152	235	249
2	297	328	293	323	292	322
3	314	351	335	373	351	384
4	293	306	307	318	320	320
Total 0-5	1,327	1,427	1,393	1,499	1,430	1,508
5-10	1,521	1,400	1,556	1,474	1,554	1,444
10-15	1,217	1,015	1,219	974	1,139	901
15-20	856	896	818	838	756	765
20-25	752	884	702	827	711	812
25-30	898	905	810	894	882	934
30-35	795	778	808	819	850	856
35-40	625	551	645	566	629	551
40-45	598	584	627	609	632	633
45-50	372	329	365	317	353	316
50-55	392	406	394	410	409	441
55-60	168	168	167	168	163	165
60 and over	449	537	466	605	478	638
Unspecified					5	6
Mean Age	24.8	24.5	24.0	24.8	24.2	25.2

SUBSIDIARY TABLE 1—*contd.*

Age distribution of 10,000 of each sex. (India and Main Provinces.)

Age	1901		1901		1901	
	Male	Female	Male	Female	Male	Female
1.	2	3	4	5	6	7.
UNITED PROVINCES.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	304	314	342	359	262	280
1	172	188	148	105	229	248
2	275	297	247	281	192	219
3	244	266	294	335	266	299
4	233	215	277	296	279	287
Total 0-5	1,228	1,310	1,309	1,446	1,228	1,333
5-10	1,208	1,263	1,328	1,290	1,337	1,276
10-15	1,256	1,073	1,166	941	1,248	999
15-20	863	764	838	732	807	719
20-25	829	885	858	899	848	915
25-30	885	896	867	895	931	945
30-35	869	881	892	910	918	927
35-40	562	563	561	544	531	525
40-45	689	719	703	722	695	737
45-50	373	357	341	321	327	315
50-55	486	510	483	517	496	527
55-60	173	173	152	150	149	144
60 and over	482	598	500	613	485	628
Unspecified	7	8	...	...	...	...
Mean Age	25.2	26.0	25.0	25.9	25.0	26.1
MADRAS.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	294	297	330	338	301	301
1	158	161	171	178	201	207
2	280	288	315	327	212	222
3	310	322	352	365	262	280
4	297	300	314	316	271	276
Total 0-5	1,339	1,368	1,482	1,524	1,247	1,286
5-10	1,434	1,406	1,391	1,346	1,320	1,354
10-15	1,300	1,140	1,084	923	1,318	1,132
15-20	825	757	828	783	875	798
20-25	711	863	820	973	819	974
25-30	755	824	821	865	827	873
30-35	816	801	828	885	892	927
35-40	599	527	592	505	591	488
40-45	670	675	670	661	650	660
45-50	876	820	865	805	829	890
50-55	465	480	427	460	416	474
55-60	190	163	177	157	142	152
60 and over	520	594	515	613	435	592
Mean Age	24.7	24.8	24.7	25.3	24.8	25.2

SUBSIDIARY TABLE I—*concl'd.*

Age Distribution of 10,000 of each sex. (India and Main Provinces.)

Age	1901		1891		1881	
	Male	Female	Male	Female	Male	Female
1.	2.	3.	4.	5.	6.	7.
BOMBAY.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	200	214	388	362	271	287
1	150	164	164	186	195	217
2	252	276	300	348	236	268
3	252	276	315	358	261	297
4	268	303	320	330	301	318
Total 0-5	1,118	1,233	1,137	1,588	1,264	1,382
5-10	1,414	1,436	1,416	1,395	1,402	1,483
10-15	1,326	1,114	1,063	886	1,286	1,089
15-20	858	806	602	753	801	763
20-25	804	813	843	935	825	918
25-30	913	926	940	931	949	944
30-35	886	880	879	872	894	886
35-40	653	602	620	552	639	571
40-45	627	640	629	676	529	498
45-50	378	355	358	319	417	433
50-55	408	431	422	412	409	450
55-60	176	163	164	149	176	182
60 and over	374	473	427	512	399	507
Unspecified	5	5	..	..	..	..
Mean Age	24.3	24.8	24.3	24.7	24.2	24.9
PUNJAB.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	304	332	409	467	313	351
1	159	177	291	318	180	202
2	258	277	297	335	209	239
3	259	291	298	317	253	288
4	277	297	325	330	274	295
Total 0-5	1,257	1,374	1,630	1,767	1,229	1,375
5-10	1,166	1,380	1,388	1,371	1,874	1,372
10-15	1,225	1,080	1,015	975	1,206	1,054
15-20	907	836	1,040	1,178	802	858
20-25	795	851	922	939	854	915
25-30	840	872	949	1,005	850	877
30-35	880	819	647	597	846	878
35-40	548	536	659	708	509	480
40-45	611	672	851	820	650	701
45-50	350	391	497	497	345	311
50-55	483	457	197	100	493	471
55-60	179	155	889	861	170	142
60 and over	322	323	321	292	582	571
Mean Age	23.1	23.1	23.1	22.8	25.3	25.1

Age distribution of 10,000 of each sex by Race.

Age	1901		1891.		Male	Female
	Male.	Female	Male	Female.		
1	2	3.	4.	5.	6.	7.
Hindu.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	256	264	318	337	257	265
1	156	168	164	178	212	201
2	266	287	278	310	231	252
3	265	291	310	348	283	311
4	263	276	297	311	263	287
Total 0—5	1,206	1,266	1,367	1,484	1,277	1,376
5—10	1,361	1,346	1,400	1,372	1,400	1,361
10—15	1,268	1,082	1,134	938	1,220	1,011
15—20	871	814	831	782	831	769
20—25	795	890	810	898	814	912
25—30	887	898	883	905	912	926
30—35	861	869	863	871	896	893
35—40	614	672	613	660	692	698
40—45	668	678	667	657	661	652
45—50	380	352	366	325	347	323
50—55	452	471	430	449	440	471
55—60	182	175	172	165	163	166
60 and over	455	567	464	594	465	577
Mean Age	24.9	25.5	24.6	25.2	24.8	25.4
Musalman.						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
0	809	828	865	897	882	906
1	164	179	195	212	217	226
2	298	329	317	352	270	303
3	302	337	337	373	329	363
4	307	324	331	346	324	333
Total 0—5	1,380	1,495	1,545	1,680	1,416	1,529
5—10	1,509	1,510	1,515	1,489	1,523	1,494
10—15	1,261	1,068	1,131	925	1,197	975
15—20	840	869	847	888	777	807
20—25	744	886	770	901	744	886
25—30	859	893	867	919	853	887
30—35	813	810	785	779	854	851
35—40	639	503	613	537	579	466
40—45	903	696	851	541	691	496
45—50	340	295	368	314	333	287
50—55	307	416	357	363	307	416
55—60	102	102	102	102	102	102
60 and over	102	102	102	102	102	102
Mean Age	24.9	25.5	24.6	25.2	24.8	25.4

Population of 10,000 of each sex by Religion —

1.	1901.		1901.		1901.	
	Male	Female.	Male	Female.	Male.	Female.
	2.	3.	4.	5.	6.	7.
<i>Christian.</i>						
TOTAL	10,000	10,000	10,000	10,000	10,000	10,000
257	257	290	251	291	278	311
193	193	224	208	245	213	248
269	269	302	293	334	240	276
287	287	326	310	367	268	321
279	279	307	276	314	267	299
1,290	1,290	1,449	1,347	1,551	1,266	1,457
1,384	1,384	1,479	1,308	1,421	1,298	1,460
1,283	1,283	1,244	1,122	1,111	1,127	1,188
865	865	905	869	922	828	884
809	809	904	1,067	934	1,079	942
699	699	688	1,007	699	1,092	919
771	771	757	772	762	896	817
630	630	550	639	552	655	530
554	554	538	557	530	556	535
380	380	334	379	328	344	318
303	303	358	344	350	319	378
186	186	169	188	181	164	163
396	396	430	401	459	376	469
240	240	234	242	236	242	236
<i>Agnostic.</i>						
TOTAL	10,000	10,000	10,000	10,000		
232	232	227	287	302		
196	196	205	192	209		
306	306	326	317	354		
325	325	356	382	431		
321	321	385	366	391		
1,370	1,370	1,449	1,544	1,687		
1,565	1,565	1,515	1,718	1,642		
1,323	1,323	1,151	1,249	1,054	Not available.	
672	672	698	744	763		
774	774	921	678	825		
855	855	884	790	868		
857	857	842	835	859		
594	594	549	567	521		
648	648	593	672	597		
301	301	284	280	252		
372	372	364	332	304		
133	133	125	117	112		

Reported death-rate at different Ages in 1897 and 1900

AGE.		RATIO PER 1,000 LIVING AT SAME AGE IN 1897.							
		ASSAM		BENGAL.		BOMBAY		BOMBAY	
		Male.	Female	Male.	Female	Male	Female	Female	
1		2.	3.	4.	5.	6.	7.	8.	9.
All ages	{ 1897	51.2	49.0	35.8	30.0	55.3	49.9	55.3	38.9
	{ 1900	31.5	29.6	39.0	34.1	86.1	79.3	86.1	67.4
0-1	{ 1897	251.8	236.4	239.1	194.4	395.9	360.9	395.9	188.1
	{ 1900	208.4	179.6	271.7	220.6	497.4	459.7	497.4	222.6
1-5	{ 1897	62.4	61.4	45.8	38.7	101.1	91.0	101.1	60.7
	{ 1900	82.3	30.1	53.2	45.6	190.0	166.9	190.0	100.4
5-10	{ 1897	31.0	26.4	19.3	15.6	24.8	21.5	24.8	18.9
	{ 1900	16.6	13.8	22.7	18.5	48.5	41.7	48.5	42.3
10-15	{ 1897	27.6	26.7	16.1	13.1	14.3	15.3	14.3	17.7
	{ 1900	15.7	14.8	18.2	15.5	27.9	27.4	27.9	35.7
15-20	{ 1897	37.8	42.4	20.5	18.5	15.3	16.8	15.3	17.8
	{ 1900	21.9	26.6	22.0	21.4	29.1	30.7	29.1	32.3
20-30	{ 1897	35.1	39.3	22.4	18.7	16.8	20.6	16.8	20.9
	{ 1900	23.0	25.9	24.9	22.4	33.5	38.4	33.5	38.1
30-40	{ 1897	40.0	39.5	21.6	10.1	27.8	24.8	27.8	25.4
	{ 1900	24.8	24.1	25.7	22.1	47.2	41.1	47.2	62.4
40-50	{ 1897	48.5	40.2	31.9	23.3	46.8	28.2	46.8	28.2
	{ 1900	29.2	23.2	31.9	25.6	72.2	44.9	72.2	59.4
50-60	{ 1897	63.0	58.2	46.7	37.3	79.6	55.7	79.6	43.1
	{ 1900	38.2	34.5	45.1	38.8	116.3	92.2	116.3	83.7
60 and over	{ 1897	111.5	92.3	83.7	61.7	150.3	127.2	150.3	112.7
	{ 1900	53.7	39.3	84.1	65.8	194.5	186.5	194.5	185.9

RATIO PER 1,000 LIVING AT SAME AGE IN 1901.											
AGE.		CENTRAL PROVINCES.		MADRAS		PUNJAB		UNITED PROVINCES		GENERAL DEATH RATE IN 1901	
		Male	Female	Male	Female	Male.	Female	Male	Female	Male.	Female
		2	3.	4.	5.	6.	7.	8.	9.	10.	11.
All ages	{ 1897	77.0	61.6	26.4	24.4	29.6	32.7	42.0	35.7	38.1	26.0
	{ 1900	63.0	52.5	24.2	22.5	45.5	50.2	31.6	30.0	28.1	26.0
0-1	{ 1897	403.0	356.1	149.9	124.2	223.0	228.0	262.9	255.1	200.3	179.1
	{ 1900	580.1	506.1	162.8	135.6	273.1	275.8	280.9	267.0	200.3	179.1
1-5	{ 1897	79.6	63.7	30.2	28.3	53.4	66.7	73.6	73.6	30.7	37.7
	{ 1900	73.1	55.4	23.2	26.3	94.9	106.2	47.9	47.9	30.7	37.7
5-10	{ 1897	45.0	35.4	13.0	11.9	10.0	10.8	20.2	19.0	12.9	11.5
	{ 1900	80.4	24.2	10.5	9.8	20.2	21.9	12.0	10.2	12.9	11.5
10-15	{ 1897	31.5	25.9	10.3	10.1	6.8	8.5	12.2	11.4	10.3	9.7
	{ 1900	29.5	19.6	8.3	8.3	13.1	16.2	8.6	11.4	10.3	9.7
15-20	{ 1897	25.3	25.0	12.5	13.6	7.4	9.6	14.6	14.6	13.0	13.0
	{ 1900	22.0	25.2	9.4	11.7	13.3	17.6	11.4	11.4	13.0	13.0
20-30	{ 1897	20.0	20.0	10.6	14.0	9.3	10.9	19.9	19.9	17.0	17.0
	{ 1900	20.0	20.0	10.6	10.9	14.6	17.8	14.9	14.9	17.0	17.0
30-40	{ 1897	20.4	20.4	17.4	11.0	12.4	14.0	27.6	27.6	17.1	15.1
	{ 1900	20.4	20.4	17.4	12.5	20.2	23.2	18.1	18.1	17.1	15.1
40-50	{ 1897	63.0	58.2	46.7	37.3	79.6	55.7	79.6	55.7	43.1	43.1
	{ 1900	38.2	34.5	45.1	38.8	116.3	92.2	116.3	92.2	83.7	83.7
50-60	{ 1897	111.5	92.3	83.7	61.7	150.3	127.2	150.3	127.2	112.7	112.7
	{ 1900	53.7	39.3	84.1	65.8	194.5	186.5	194.5	186.5	185.9	185.9
60 and over	{ 1897	188.1	141.6	188.1	141.6	188.1	141.6	188.1	141.6	188.1	141.6
	{ 1900	181.8	113.4	181.8	113.4	181.8	113.4	181.8	113.4	181.8	113.4

SUBSIDIARY TABLE IV

Proportion of persons under 10 years of age and of persons over 50 to persons aged 20-40.

Province, State or Agency	PROPORTION OF CHILDREN (BOTH SEXES COMBINED) UNDER 10 TO 100				PROPORTION OF PERSONS OVER 50 TO 100 PERSONS AGED 20-40.				PROPORTION OF MARRIED FEMALES AGED 15-40 PER 100 FEMALES	
	Persons aged 20-40		Married Females aged 15-40		1901		1891		1901	1891
	1901	1891	1901	1891	Male	Female	Male	Female		
INDIA	85	91	167	174	35	37	34	30	33	34
Provinces	87	92	170	175	35	37	34	37	33	34
Ajmer-Merwara	50	90	100	171	26	32	33	37	33	35
Assam	91	98	193	202	27	26	30	29	32	32
Bengal	93	97	174	181	33	37	34	33	33	32
Bihar	69	86	132	161	32	32	30	38	36	36
Bombay	80	88	166	171	30	33	31	35	33	35
Burma	83	86	206	212	35	41	36	45	36	25
Central Provinces	80	100	155	182	28	34	35	37	33	34
Coorg	61	64	164	163	17	23	16	21	32	35
Madras	93	91	179	175	41	40	37	38	31	32
N.-W. F. Province and Punjab	89	97	173	181	41	38	28	25	34	37
United Provinces	80	83	153	157	36	40	36	40	34	35
States and Agencies	77	88	157	171	33	35	32	34	33	35
Baroda State	65	85	135	162	24	30	30	33	34	36
Bengal States	99	104	193	201	29	31	30	32	32	30
Bombay States	76	90	153	170	26	29	30	34	34	35
Central India Agency	63	82	139		28	32	29	31	33	39
Central Provinces States	92	110	184	203	22	25	28	31	33	33
Hyderabad State	77	87	157	164	36	36	35	37	33	35
Kashmir State	99	103	190	...	40	35	41	39	33	31
Madras States	82	79	166	156	32	39	34	34	32	33
Mysore State	94	86	193	176	42	46	33	27	29	32
Punjab States	80	89	155	170	30	39	27	26	35	38
Rajputana Agency	70	80	140	150	30	36	34	39	34	45
United Provinces States	76	83	140	149	32	37	40	43	37	36

NOTE.—In 1891, the Civil Condition of a very small number of persons was recorded in Central India Agency, Kashmir and Rajputana Agency and for this reason no useful purpose will be served by comparing the figures for 1901 with those figures.

SUBSIDIARY TABLE V.

Variation in Population at certain age-periods.

PROVINCE, STATE OR AGENCY.	Period.	VARIATION PER CENT. IN POPULATION.					
		ALL AGES.	0-10	10-15.	15-20.	20-25.	25 and over.
INDIA.	1881-1891	+11.2	+16.1	+4.3	+10.8	+10.8	+8.0
	1891-1901	+1.8	-5.1	+14.5	+2.3	+2.3	+0.3
PROVINCES.	1881-1891	+10.7	+15.1	+5.1	+10.5	+10.5	+6.4
	1891-1901	+3.5	-2.4	+15.3	+5.7	+5.7	+3.1
Ajmer-Merwara	1881-1891	+17.7	+20.1	+55.5	+5.5	+5.5	+36.2
	1891-1901	-12.1	-14.5	+8.4	+5.1	+5.1	-34.5
Assam	1881-1891	+15.5	+14.1	+25.5	+16.4	+16.4	+9.8
	1891-1901	+7.1	+4.2	+7.1	+12.2	+12.2	-9.7
Bengal	1881-1891	+7.3	+7.1	+15.3	+6.9	+6.9	+2.8
	1891-1901	+5.4	+2.6	+8.7	+7.9	+7.9	...
Berar	1881-1891	+8.4	+8.6	+10.2	+6.2	+6.2	+10.3
	1891-1901	-4.9	-19.2	+2.6	+2.6	+2.6	-27.2
Bombay Presidency	1881-1891	+1.8	+23.3	-6.5	+13.6	+13.6	+37.5
	1891-1901	-5.5	-15.2	+19.8	-4.1	-4.1	-17.4
Sind	1881-1891	+18.9	+21.8	+11.6	+21.2	+21.2	+18.3
	1891-1901	+11.8	+2.7	+33.4	+14.9	+14.9	-6.7
Gujarat	1881-1891	+13.8	+23.8	-12.9	+10.2	+10.2	+63.1
	1891-1901	-26.4	-41.2	-4.1	-19.9	-19.9	-46.7
Other parts	1881-1891	+16.5	+24.0	-5.0	+14.4	+14.4	+32.0
	1891-1901	+2.9	-4.5	-31.5	+1.6	+1.6	-5.6
Burma	1881-1891	+24.6	+10.6	+22.9	+28.6	+28.6	+30.1
	1891-1901	+21.3	+22.3	+13.2	+23.8	+23.8	+14.7
Central Provinces	1881-1891	+12.1	+12.9	+23.0	+8.1	+8.1	+12.4
	1891-1901	-8.3	-20.6	+1.3	+0.4	+0.4	-30.0
Coorg	1881-1891	-2.9	+10.5	-18.6	-8.3	-8.3	+8.2
	1891-1901	+4.3	-3.9	+33.8	+1.8	+1.8	+9.4
Madras	1881-1891	+18.5	+20.2	-3.0	+16.1	+16.1	+23.9
	1891-1901	+7.7	+4.2	+31.2	+3.2	+3.2	+6.2
N.-W. F. Province and Punjab	1881-1891	+10.6	+27.1	-1.5	+18.8	+18.8	-41.0
	1891-1901	+6.8	-6.5	+26.2	-1.4	-1.4	+105.9
United Provinces of Agra and Oudh	1881-1891	+6.3	+9.9	-0.3	+5.5	+5.5	+9.5
	1891-1901	+1.6	-3.2	+12.2	+1.6	+1.6	-4.2
States and Agencies.	1881-1891	+17.7	+28.7	-5.1	+14.5	+14.5	+32.8
	1891-1901	-7.2	-19.4	+10.7	-4.6	-4.6	-14.5
Baroda State	1881-1891	+10.5	+14.6	-0.8	+10.9	+10.9	+16.7
	1891-1901	-19.2	-35.6	+1.1	-12.4	-12.4	-40.6
Central India Agency	1881-1891 . . . . .	...	...	...	...	...	...
	1891-1901	-16.4	-32.9	-10.1	-9.3	-9.3	-29.2
Cochin State	1881-1891 . . . . .	...	...	...	...	...	...
	1891-1901	+12.3	+11.8	+18.4	+11.6	+11.6	+9.1
Hyderabad State	1881-1891	+19.1	+26.9	+2.7	+17.0	+17.0	+30.1
	1891-1901	-3.4	-14.2	+18.7	-2.8	-2.8	-12.2
Kashmir State	1881-1891 . . . . .	...	...	...	...	...	...
	1891-1901	+14.4	+8.0	+48.1	+15.2	+15.2	+14.1
Mysore State	1881-1891	+18.1	+42.1	-22.2	+10.5	+10.5	+49.6
	1891-1901 . . . . .	...	+9.0	+39.4	...	...	+21.2
Rajputana Agency	1881-1891 . . . . .	...	...	...	...	...	...
	1891-1901 . . . . .	...	...	...	...	...	-27.8
Travancore State	1881-1891 . . . . .	...	...	...	...	...	...
	1891-1901	+15.4	+21.6	+21.2	+14.2	+9.3	+0.4

NOTE.—Column 3 shows variation in population for which age was returned at both enumerations and not in total population. The comparison for the Punjab is vitiated by the adjustment made in 1891 in order to allow for the entry of the current year of life in the schedules—vide paragraph 746.

CHAPTER XI.

Caste, Tribe, and Race.*

On a stone panel forming part of one of the grandest Buddhist monuments in India—the great tope at Sanchi—a carving in low relief depicts a strange religious ceremony. Under trees with conventional foliage and fruits, three women, dressed in tight clothing without skirts, kneel in prayer before a small shrine or altar. In the foreground, the leader of a procession of monkeys bears in its hands a bowl of liquid and stoops to offer it at the shrine. His solemn countenance and the grotesquely adoring gestures of his comrades seem intended to excite reverence, devotion, and humility. In the background four stately figures, two men and two women of tall stature and regular features, clothed in flowing robes and wearing most elaborate turbans, look on with folded hands and apparent approval at this remarkable act of worship. Antiquarian speculation for the most part passed the panel by unnoticed, or has sought to associate it with some pious legend of the life of Buddha. A larger interest, however, attaches to the scene, if it is regarded as the sculptured expression of the race sentiment of the Aryans towards the Dravidians, which runs through the whole course of Indian tradition and survives in scarcely abated strength at the present day. On this view the relief would belong to the same order of ideas as the story in the Ramayana of the army of apes who assisted Rāma in the invasion of Ceylon. It shows us the higher race on friendly terms with the lower, but keenly conscious of the essential difference of type and taking no active part in the ceremony at which they appear as sympathetic but patronising spectators. An attempt is made in the following pages to show that the race sentiment, which inspired this curious sculpture, rests upon a foundation of fact which scientific methods confirm; that it supplied the motive principle of caste; that it continues, in the form of fiction or tradition, to shape the most modern developments of the system, and, finally, that its influence has tended to preserve in comparative purity the types which it favours.

The race basis of caste.

§ 1. It is a familiar experience that the ordinary untravelled European, on first arriving in India, finds much difficulty in distinguishing one native of the country from another. To his untrained eye all Indians are black; all have the same cast of countenance, and all, except the 'decently naked' labouring classes, wear loose garments which revive dim memories of the attire of the Greeks and Romans. An observant man soon shakes off these illusions, and realises the extraordinary diversity of the types which are met with everywhere in India. The first step in his education is to learn to tell a Hindu from a Muhammadan. A further stage is reached when it dawns upon him that the upper classes of Hindus are much fairer than the lower and that their features are moulded on finer lines. Later on, if opportunity favours him, he comes to recognise at a glance the essential differences between the Punjabi and the Bengali; the Pathān and the Gurkha; the Rājput and the 'Jungly' tea coolie; he will no longer take a Marāthā Brāhman for a Madrasi; or an Oriya for a native of Kashmir. He learns, in short, to distinguish what may be called the Provincial types of the people of India, the local, racial, or linguistic aggregates, which at first sight seem to correspond to the nations of Europe. But the general impressions thus formed, though accurate enough so far as they go, are wanting in scientific precision. They cannot be recorded or analysed; no description can convey their effect; they melt away in the attempt to fix them, and leave nothing behind.

Provincial types in India.

§ 2. The modern science of ethnology endeavours to define and classify the various physical types, with reference to their distinctive characteristics, in the hope that when sufficient data have been accumulated it may be possible in some measure to account for the types themselves, to determine the elements of which they are composed, and thus to establish their connexion with one or other of the great families of mankind. In India, where historical evidence can hardly be relied upon, the data ordinarily available are of three kinds—physical

The data of ethnology.

* The data of ethnology are so numerous and so varied that it is necessary to relegate to a separate volume, entitled *Descriptive Details*, the descriptive details which illustrate this chapter.

characters, linguistic characters, and physical characters. Of these the first are by far the most trustworthy, and it is hardly an exaggeration to say, as the late Sir William Flower wrote to me some years ago, "linguistical characters are the best, in fact the only true tests of race, that is, of nationality. Language, customs, etc., may help or give indications, but they are often misleading."

Indefinite
physical
characters.

767. For ethnological purposes physical characters may be said to be of two kinds, *indefinite* characters which can only be described in more or less appropriate language, and *definite* characters which admit of being measured and reduced to numerical expression. The former class, usually called *descriptive* or *secondary* characters, includes such points as the colour and texture of the skin; the colour, form and position of the eyes; the colour and character of the hair; and the form of the face and features. Conspicuous as these traits are, the difficulty of observing, defining, and recording them is extreme. Colour, the most striking of them all, is perhaps the most evasive, and deserves further mention as a typical instance of the shortcomings of the descriptive method. Some forty years ago the French anthropologist Broca devised a chromatic scale consisting of twenty shades, regularly graduated and numbered, for registering the colour of the eyes, and thirty-four for the skin. The idea was that the observer would consult the scale and note the numbers of the shades which he found to correspond most closely with the colouring of his subjects. Experience, however, has shown that with a scale so elaborate as Broca's the process of matching colours is not so easy as it looks, that different people are apt to arrive at widely different conclusions, and that even when the numbers have been correctly registered no one can translate the result of the observations into intelligible language. For these reasons Broca's successor Topinard reverted to the method of simple description, unaided by any scale of pattern colours. He describes, for example, the mud-coloured hair so common among the peasants of Central Europe as having the colour of a dusty chestnut. In the latest edition of the *Anthropological Notes and Queries* published under the auspices of the British Association an attempt is made to combine the two systems. A greatly simplified colour scale is given, and each colour is also briefly described. This method is being used in the *Ethnographic Survey of India* for recording the colour of the skin, but I do not expect it to yield very satisfactory results, and I doubt whether it is possible to do more than describe very generally the impression which a particular colour makes upon the observer. In point of fact the colour of the skin is rather what may be called an artistic expression, dependent partly upon the action of light, partly on the texture and transparency of the skin itself and partly again on the great variety of shades which occur in every part of its surface. It is hopeless to expect that this complex of characters can be adequately represented by a patch of opaque paint which is necessarily uniform throughout and devoid of any suggestion of light and shade.

Colour of
skin.

768. The difficulty which besets all attempts to classify colour is enhanced in India by the fact that for the bulk of the population, the range of variation, especially in the case of the eyes and hair, is exceedingly small. The skin no doubt exhibits extreme divergences of colouring which any one can detect at a glance. At one end of the scale we have the dead black of the Andamanese, the colour of a black-leaded stove before it has been polished, and the somewhat brighter black of the Dravidians of Southern India, which has been aptly compared to the colour of strong coffee unmixed with milk. Of the Irulas of the Nilgiri jungles some South Indian humourist is reported to have said that charcoal leaves a white mark upon them. At the other end one may place the flushed ivory skin of the traditional Kashmiri beauty and the very light transparent brown—"wheat-coloured" is the common vernacular description—of the higher castes of Upper India, which Emil Schmidt compares to milk just tinged with coffee and describes as hardly darker than is met with in members of the swarthier races of Southern Europe. Between these extremes are found countless shades of brown, darker or lighter, transparent or opaque, frequently tending towards yellow, more rarely approaching a reddish tint, and occasionally degenerating into a sort of greyish black which seems to depend on the character of the surface of the skin. It would be a hopeless task to attempt to measure and classify these variations. The only way to evolve order out of the chaos of colour is to evolve a minute

gradations of colour are comparatively unstable, and are liable to be affected not only by exposure to sun and wind but also by differences of temperature and humidity. A native of Bengal has assured me that people of their race, one of the fairest in India, become appreciably fairer when domiciled in Hindostan or the Punjab, and the converse process may be observed not only in natives of Upper India living in the damp heat of the Ganges delta, but in Indians returning from a prolonged stay in Europe, who undergo a perceptible change of colour during the voyage to the East. The fair complexion of the women of the shell-cutting Sankāri caste in Dacca is mainly due to their seclusion in dark rooms, and the Lingāyats of Southern India who wear a box containing a tiny phallus tied in a silk cloth round the upper arm, show, when they take it off, a pale band of skin contrasting sharply with the colour of the rest of the body.

769. Still less variety is traceable in the character of the eyes and hair. Hair and eyes From one end of India to the other the hair of the great mass of the population is black or dark brown, while among the higher castes the latter colour is occasionally shot through by something approaching a tawny shade. Straight hair seems on the whole to predominate, but the wavy or curly character appears in much the same proportion as among the races of Europe. The Andamanese have woolly or frizzly hair, oval in section and curling on itself so tightly that it seems to grow in separate spiral tufts, while in fact it is quite evenly distributed over the scalp. Although the terms woolly and frizzly have been loosely applied to the wavy hair not uncommon among the Dravidians, no good observer has as yet found among any of the Indian races a head of hair that could be correctly described as woolly. The eyes are almost invariably dark brown. Occasional instances of grey eyes are found among the Konkanasth Brāhmans of Bombay and the combination of blue eyes, auburn hair, and reddish blonde complexion is met with on the North-Western frontier. On the Malabar coast in the south Mr. Thurston has noticed several instances of pale blue and grey eyes combined with a dark complexion and has even seen a Syrian Christian baby of undoubted native parentage with bright carrotty hair. The Syrian Christians of South Travancore say that they differ from the northerners in having a red tinge to the moustache.

770. When we turn to the definite or anthropometric characters we find ourselves upon firmer ground. The idea of applying instruments of precision to the measurement of the human body was familiar to the Egyptians and the Greeks, both of whom appear to have made extensive experiments with the object of arriving at a 'canon' or ideal type showing the proportions which various parts of the body should bear to the entire figure and to each other. Such canons were usually expressed either in terms of a particular member of which the rest were supposed to be multiples, or in fractional parts of the entire stature. Thus, according to Lepsius, the Egyptian canon is based on the length of the middle finger and this measure is supposed to be contained nineteen times in the full stature, three times in the head and neck, eight times in the arm, and so forth. The Greek canon, on the other hand, as restored by Quetelet, expresses the limbs and other dimensions in thousandth parts of the entire stature. Concerning this canon a curious story is told by Topinard, not without interest in its bearings upon the relations of Egyptian and Greek art. In 1866 the eminent French Anthropologist, M. Paul Broca, was asked on behalf of an artist who was engaged in the attempt to reconstruct the Greek standard, to provide a skeleton corresponding in its proportions to certain measurements derived from an examination of the Belvedere Apollo. After some search Broca found in the Museum of the Anthropological Society at Paris a skeleton of the type required. It was that of a Soudanese negro named Abdullah, and from this Broca concluded that the famous statue of Apollo had been modelled on the Egyptian canon, which in his opinion had been derived by Egyptian sculptors from the study of the Nubian negroes whom they employed as models.

The Roman canon handed down in the treatise *De Architectura* of Vitruvius was taken up and developed in the early days of the Renaissance by Leo Battista Alberti himself, like Vitruvius, an architect, and a curious enquirer into the laws of nature and the human frame. Forty years later Leonardo da Vinci, who was a more accurate observer, arrived at the general opinion that the proportions of the human body were the same in children and adults of both sexes, and

Definite physical characters the various artistic canons.

refuted the opinion of Vitruvius that the navel should be deemed the centre of the body. Following Leonardo's suggestions, Albrecht Dürer applied himself to the task of working out the proportions of the body for different ages and sexes, for persons of different heights, and different types of figure. In his 'Four books on the proportions of the human figure,' published at Nuremberg in 1528, the year of his death, Dürer also discussed the difficult question of the so-called 'orientation' or adjustment of the head in an upright position, and he is believed by the authors of the *Crania ethnica* to have also anticipated Galen's invention of the facial angle. Jean Cousin, a French contemporary of Dürer's, took the nose as his unit of length and represented the ideal head as measuring four noses, and the ideal stature as equivalent to eight heads or thirty-two noses. Cousin's system, slightly modified by Charles Blanc, holds its own at the present day as the *canon des ateliers* of French artists, preference, however, being given in ordinary parlance to the head rather than the nose as the unit of length.

771. All these canons, it will be observed, approach the subject purely from the artistic point of view, and, so far from taking account of the distinctive characters of particular races, incline to sink these in the attempt to frame a general canon of the proportions of the body which should hold good for the whole of mankind. Such an endeavour would be foreign to the purpose of anthropology, which fixes its attention on points of difference rather than of resemblance, and seeks by examination and analysis of such differences to form hypotheses concerning the genesis of the distinct race stocks now in existence. It would perhaps be fanciful to trace the germs of anthropometric research in the statement of Herodotus that the skulls of the Persian soldiers slain at the battle of Plataea were thin, and those of the Egyptians were thick, or to cite his explanation, that the former lived an indoor life and always wore hats, while the latter shaved their heads from infancy and exposed them to the sun without covering, as the earliest instance of the modern scientific doctrine of the influence of external conditions. But when Ctesias speaks of the small stature, black complexion, and snub noses of the inhabitants of India, we feel that the description is precise enough to enable us to identify them with the *Dasyus* and *Nishadas* of early Sanskrit literature, and we are almost tempted to wonder whether the Greek physician, who was doubtless acquainted with the canon of Polykleitos, may not have devised some accurate method of recording the racial characteristics of which he was so close an observer. (Curiously enough the famous potter, Bernard de Palissy, was the first to throw out, in a humorous dialogue published in 1563, the idea of measuring the skull for purposes other than artistic. The passage quoted by Topinard is too quaint to be omitted here:—
"Quoy voyant il me print envie de mesurer la teste d'un homme pour savoir directement ses mesures, et me semble que la sauterelle, la règle, et le compas me seroient fort propres pour cest affaire, mais quoy qu'il en soit je n'y sceu jamais trouver une mesure osseuse, parce que les folies qui estoient en ladite teste luy faisoient changer ses mesures."

772. Palissy, however, cannot be seriously put forward as the founder of scientific craniometry and that title perhaps most properly belongs to the Swedish naturalist Anders Retzius who in 1842 hit upon the device of expressing one of the chief characters of the skull by the relation of its maximum breadth to its maximum length, the latter being taken to be one thousand. In this way he distinguished two forms of skull—the *dolicho-cephalic*, or long-headed type, in which the length exceeds the breadth by about one-fourth, and the *brachy-cephalic*, or short-headed type, in which the length exceeds the breadth by a proportion varying from one-fifth to one-eighth. Thus according to Retzius the Swedes are long-headed in the proportion 773 : 1000 and the Lapps short-headed in the proportion 865 : 1000. He also distinguished two types of face—the *orthognathic*, in which the jaws and teeth project not at all, or very little beyond a line drawn from the forehead, and the *prognathic*, in which this projection is very marked. His classification of races was based upon these characteristics. In 1861 M. Paul Broca improved Retzius' system by expressing it in hundredths instead of thousandths, by introducing an intermediate group called *mesati-cephalic* or medium-headed ranging from 77.7 to 80 per cent, and by giving the name of *cephalic index* to the relation between the two characters. Numerous other measurements have since been introduced into the study of the subject, have since been introduced.

Racial
anthropo-
metry.

Methods of
Retzius and
Broca

773. In the earlier days of Anthropology, it was natural that the attention of students should have been directed mainly to the examination of skulls. Craniometry seemed to offer a solution of the problems regarding the origin and antiquity of the human race which then divided the scientific world. Its precise method promised to clear up the mystery of the pre-historic skulls discovered in the quaternary strata of Europe, and to connect them on the one side with a possible simian ancestor of mankind and on the other with the races of the present day. The latter line of research led on to the measurements of living subjects, which have since been undertaken by a number of enquirers on a very large scale. Anthropometry, which deals with living people, while craniometry is concerned exclusively with skulls, possesses certain advantages over the elder science. For reasons too technical to enter upon here, its procedure is in some respects less precise and its results less minute and exhaustive than those of craniometry. These minor shortcomings are, however, amply made up for by its incomparably wider range. The number of subjects available is practically unlimited; measurements can be undertaken on a scale large enough to eliminate, not merely the personal equation of the measurer, but also the occasional variations of type arising from inter-mixture of blood, the investigation is not restricted to the characters of the head, but extends to the stature and the proportions of the limbs. A further advantage arises from the fact that no doubts can arise as to the identity of the individuals measured. In working with skulls, whether pre-historic or modern, this last point has to be reckoned with. The same place of sepulture may have been used in succession by two different races, and the skulls of conquering chiefs may be mixed with those of alien slaves or of prisoners slain to escort their captors to the world of the dead. The savage practice of head-hunting may equally bring about a deplorable confusion of cranial types, famine skulls may belong to people who have wandered from no one knows where; and even hospital specimens may lose their identity in the process of cleaning. In the second of his elaborate monographs on the craniology of the people of India Sir William Turner observes* that among the Oriya skulls belonging to the Indian Museum, which were lent to him for examination some crania partake "of Dravidian, others of Aryan characters" while in others again there is "a trace of Mongolian or other brachy-cephalic inter-mixture." He surmises, therefore, that "no proper history of the dead had been obtained, and that in consequence the skulls had not been accurately identified." As a matter of fact most of these skulls were acquired during the Orissa famine of 1866, and the only description they bear is "Uriya" or "Orissa," the word "Hindu" being occasionally added. To any one who is acquainted with the conditions which prevailed in Orissa at that time it is obvious that a given skull may have belonged to a broad-nosed Dravidian from the hill tracts, to a high caste Hindu of the coast strip, or to a Mongoloid pilgrim from Nepal who died of starvation or cholera while seeking salvation at Jagannāth. The characters of the skulls themselves render it probable that all of these indefinite groups are represented in the collection.

Craniometry
and
Anthropo-
metry

774. Scientific anthropometry was introduced into India on a large scale seventeen years ago in connexion with the ethnographic survey of Bengal then in progress. The survey itself was a first attempt to apply to Indian ethnography the methods of systematic research sanctioned by the authority of European anthropologists. Among these the measurement of physical characters occupies a prominent place, and it seemed that the restrictions on intermarriage, which are peculiar to the Indian social system, would favour this method of observation and would enable it to yield peculiarly clear and instructive results. A further reason for resorting to anthropometry was the fact that the wholesale borrowing of customs and ceremonies which goes on among the various social groups in India makes it practically impossible to arrive at any certain conclusions by examining these practices. Finally, the necessity of employing more precise methods was accentuated by Mr Nesfield's† uncompromising denial of the truth of "the modern doctrine which divides the population of India into Aryan and aboriginal," and his assertion of the essential unity of the Indian race, enforced as it was by the specific statements that "the great majority of Britons are not of lighter complexion or of finer and better bred features

Anthropo-
metry in
India.

* *Proceedings of the Royal Society of Edinburgh*, Vol. XL—Part I.—(No. 6)

† *Journal of the Asiatic Society of Bengal*, Vol. XL—Part I.—(No. 6)

than any other caste" and that a stranger walking through the class rooms of the Sanskrit College at Benares "would never dream of supposing" that the high caste students of that exclusive institution "were distinct in race and blood from the scavengers who swept the roads" A theory which departed so widely from the current beliefs of the people and from the opinions of most independent observers called for the searching test which anthropometry promised to furnish, and the case was crucial enough to put the method itself on its trial. The experiment has been justified by its results.

The data
now
available.

75. In 1890 I published in the *Journal of the Anthropological Institute** under the title 'The Study of Ethnology in India' a summary of the measurement of eighty-nine characteristic tribes and castes of Bengal, the United Provinces of Agra and Oudh, and the Punjab. These measurements were taken in accordance with a scheme approved by the late Sir William Flower of the British Museum and Professor Topinard of Paris. Topinard's instruments were used and his instructions were closely followed throughout. Analysis of the data rendered it possible to distinguish, in the area covered by the experiment, three main types, which were named provisionally Aryan, Dravidian, and Mongoloid. The characteristics of these types will be discussed fully below. Here it is sufficient to remark that the classification was accepted at the time by Flower, Beddoe, and Haddon in England, by Topinard in France, and by Virchow, Schmidt, and Kollmann in Germany. It has recently been confirmed by the high authority of Sir William Turner, who has been led by the examination of a large number of skulls to the same conclusions that were suggested to me by measurements taken on living subjects, and has been good enough to quote my descriptions of the leading types in his monograph† on the subject. Similar confirmation is furnished in the case of the Punjab by the craniometric researches of Lieutenant-Colonel Havelock Charles‡. Great additions have been made to the number of measurements on living subjects by the exertions of Mr Edgar Thurston, Superintendent of Ethnography for Southern India, under the comprehensive scheme recently sanctioned by His Excellency Lord Curzon, by Mr T. H. Holland, Director of the Geological Survey of India, who has contributed important data for the Coorgs and Yeruvas of Southern India and the Kanets of Kulu and Lahoul, by my Anthropometric Assistants Rai Sahib Kumud Behari Samanta and Mr B. A. Gupte, who have carried out under my instructions an extensive series of measurements in Baluchistan, Rajputana, Bombay, and Orissa, and by Lieutenant-Colonel Waddell, C.I.E., of the Indian Medical Service, who has published some most valuable data for Assam and parts of Bengal in the *Journal of the Asiatic Society of Bengal* §.

Method of
treatment
adopted.

776. It is clearly impossible, within the compass of a Census Report, to enter upon a full analysis of all the measurements which have been collected. I have therefore selected three characters, the proportions of the head, the proportions of the nose, and the stature, and have included them in the tables in the volume of appendices. For two groups I have also taken the orbito-nasal index which affords a very precise test of the comparative flatness of face, determined mainly by the prominence or depression of the root of the nose in relation to the bones of the orbit and cheek, which is a distinctive characteristic of the Mongolian races. The measurements are arranged under the seven types into which I now propose to divide the population, in every case the average and the maximum and minimum indices or dimensions are shown; and for each type diagrams are given showing the seriation of the data for the tribes or castes selected as characteristic of the type. It need hardly be added that the conclusions which I have ventured to put forward are necessarily provisional, and will be of use mainly as a guide to research and as an indication of the progress made up to date in this line of enquiry. During the next five years the data will be greatly aided to by the ethnographic survey, and we may then hope to be in a position to make some approach to a final classification of the people of India on the basis of their physical characters.

* J. A. I., XX, 235.

† *Contributions to the Craniology of the People of the Empire of India*. Transactions of the Royal Society of Edinburgh, Vol. XXXIX, Part IV (No. 28), Vol. XL, Part I (No. 6).

‡ *Journal of Anatomy and Physiology*. Vol. XXVII, p. 20.

§ J. A. S. B., Vol. LXIX, Part III, 1900.

777- Meanwhile it may be of service to point out that no natural classification of the varieties of the human species has as yet been arrived at. Certain extreme types can of course be readily distinguished. No one can fail to recognize the enormous structural differences between an Andamanese and a Chinaman, an Englishman and a Negro, or a Patagonian and a Hottentot. But owing to the tendency of individuals to vary, and the intermixture of races which has gone on more or less at all times, and is continually increasing with modern improvements in communications, the apparently impassable gulf between the extreme types is bridged over by a number of intermediate or transitional forms which shade into each other by almost imperceptible degrees. It is therefore practically impossible to divide mankind into a number of definite groups in one or other of which every individual will find a place. Even as regards the primary groups there has been great diversity of opinion, and the number suggested by different writers ranges from two to more than sixty. In the main, however, as Flower has pointed out, there has always been a tendency to revert to the four primitive types sketched out by Linnæus—the European, Asiatic, African, and American, reduced by Cuvier to three by the omission of the American type. Flower himself is of opinion “that the primitive man, whatever he may have been, has in the course of ages divergated into three extreme types represented by the Caucasian of Europe, the Mongolian of Asia, and the Ethiopian of Africa, and “that all existing individuals of the species can be ranged around these types or somewhere or other between them” He therefore adopts as the basis of his classification the following three types —

- I. The Ethiopian, Negroid, or black type with dark or nearly black complexion, frizzly black hair; a head almost invariably long (dolicho-cephalic), a very broad and flat nose, moderate or scanty development of beard, thick, everted lips, large teeth; and a long forearm.

The three primary types

The Negroid is again sub-divided into four groups, with only one of which we are concerned here. This is the Negrito, represented within the Indian Empire by the Andamanese enumerated for the first time in the present Census, and possibly by the Semangs of the jungles of Malacca, some of whom may have wandered up into the Mergui district of Burma. In respect of colour and hair, the Andamanese closely resemble the negro, but they have broad heads, their facial characters are different, and they form a very distinct group which has not been affected by intermixture with other races.

- II. The Mongolian, Xanthous, or yellow type, with yellow or brownish complexion. These races have coarse straight hair without any tendency to curl, they are usually beardless or nearly so, they are mostly broad-headed, the face is broad and flat with projecting cheek bones, the nose small, and conspicuously depressed at the root, the eyes sunken and eyelids peculiarly formed so as to give the eye itself the appearance of slanting downwards, the teeth of moderate size.

The Northern or Mongolo-Altai group of Mongolians includes the nomadic races of Central Asia whose influence on the population of India will be discussed later on. The Tibetans and Burmese are members of the Southern Mongolian group.

- III. The Caucasian or white type has usually a fair skin; hair fair or black, soft, straight or wavy, beard fully developed; the head form is long or medium; the face narrow; the nose narrow and prominent; the teeth small and the forearm short.

Following Huxley, Flower divides the Caucasians into two groups —

- (a) The Xanthochroi or blonde type, with fair hair, light eyes, and fair complexion. They “chiefly inhabit Northern Europe, but, much mixed with the next type, they extend as far as Northern Africa and Afghanistan.”
- (b) Melanochroi, “with black hair and eyes, and skin of almost all shades from white to black.” Flower includes in this group not only the great majority of the inhabitants of Southern Europe, Northern Africa and South-West Asia, consisting mainly of the Aryan, Semitic and Hamitic families, but also the Dravidians of India, and the Veddahs of Ceylon.

778. Here we are confronted at once with the drawbacks which attend all attempts at systematic arrangement. It is difficult not to distrust a classification which brings together in the same category people of such widely different appearance, history, and traditions as the modern Greeks and Italians, and the black broad-nosed Dravidians of Central and Southern India. Paschel's arrangement seems to be in closer accordance with the facts established by recent observations. He divides the Caucasian type into (a) Indo Germans, (b) Semites, (c) Hamites or Berbers, and includes the 'Hindus' (non-Dravidian Indians) in the first of these groups. The Dravidians are classed with Sinhalese and Veddahs as people of uncertain origin. Huxley treats them as Australioid.

Then
application
to India

779 In respect of classification the general position in India is closely parallel to that described above. It is easy enough to distinguish certain well-marked types. Our difficulties begin when we attempt to carry the process of classification further and to differentiate the minor types or sub-types which have been formed by varying degrees of intermixture between the main types. The extremes of the series are sharply defined, but the intermediate types melt into each other, and it is hard to say where the dividing line should be drawn. Here measurements are of great assistance, especially if they are arranged in a series so as to bring out the relative preponderance of certain characters in a large number of the members of particular groups. This is well illustrated by the diagrams in the volume of appendices and will be more fully dwelt upon below. We are further assisted by the remarkable correspondence that may be observed at the present day, in all parts of India except the Punjab, between variations of physical type and differences of grouping and social position. This of course is due to the operation of the caste system, which in its most highly developed form, the only form which admits of precise definition, is, I believe, entirely confined to India. Nowhere else in the world do we find the population of a large continent broken up into an infinite number of mutually exclusive aggregates, the members of which are forbidden by an inexorable social law to marry outside of the group to which they themselves belong. Whatever may have been the origin and the earlier developments of caste, this absolute prohibition of mixed marriages stands forth now as its essential and most prominent characteristic, and the feeling against such unions is so deeply engrained in the people that even the Theistic and reforming sect of the Brāhmo Samāj has found a difficulty in freeing itself from the ancient prejudices, while the Lingavats of Western and Southern India have transformed themselves from a sect into a caste within recent times. In a society thus organized, a society putting an extravagant value on pride of blood and the idea of ceremonial purity, differences of physical type, however produced in the first instance, may be expected to manifest a high degree of persistence, while methods which seek to trace and express such differences find a peculiarly favourable field for their operations. In this respect India presents a remarkable contrast to most other parts of the world, where anthropometry has to confess itself hindered, if not baffled, by the constant intermixture of types obscuring and confusing the data ascertained by measurements. Thus in Europe, as Topinard observes, there is nothing to prevent the union "of the blond Kymri with the dark-haired dweller on the Mediterranean, of the broad-headed Celt with the long-headed Scandinavian, of the tiny Laplander with the tall Swede." In fact all the recognized nations of Europe are the result of a process of unrestricted crossing which has fused a number of distinct tribal types into a more or less definable national type. In India the process of fusion has long ago been arrested and the degree of progress which it had made up to the point at which it ceased to operate is expressed in the physical characteristics of the groups which have been left behind. There is consequently no national type and no nation in the ordinary sense of the word.

Conditions
favourable
to
anthro-
pometry

Measurement
of head
form.

780. The measurements themselves require a few words of explanation, which will be given in as popular language as the nature of the subject permits. The form of the head is ascertained by measuring in a horizontal plane the greatest length from a definite point on the forehead (the glabella) to the back of the head, and the greatest breadth a little above the ears. The proportion of the breadth to the length is then expressed as a percentage called the cephalic index, the length being taken as 100. Heads with a breadth of 80 per cent. and over are classed as broad or brachy-cephalic; those with an index under 80,

but not under 75, are called **medium heads** (meso-or mesati-cephalic); long or dolicho-cephalic heads are those in which the ratio of breadth to length is below 75 per cent.

781. It is not contended that these groupings correspond to the primary divisions of mankind. Long, broad and medium heads are met with in varying degrees of preponderance among the white, black and yellow races. But within these primary divisions the proportions of the head serve to mark off important groups. Topinard shows how the form expressed by the index separates the long-headed Scandinavian people from the broad-headed Celts and Slavs; while the Esquimaux are distinguished on similar grounds from the Asiatic Mongols, and the Australians from the Negritos. All authorities agree in regarding the form of the head as an extremely constant and persistent character, which resists the influence of climate and physical surroundings, and (having nothing to do with the personal appearance of the individual) is not liable to be modified by the action of artificial selection. Men choose their wives mainly for their faces and figures, and a long-headed woman offers no greater attractions of external form and colouring than her short-headed sister. The intermixture of races with different head-forms will of course affect the index, but even here there is a tendency to revert to the original type when the influence of crossing is withdrawn. On the whole, therefore, the form of the head, especially when combined with other characters, is a good test of racial affinity. It may be added that neither the shape nor the size of the head seems to bear any direct relation to intellectual capacity. People with long heads cannot be said to be cleverer or more advanced in culture than people with short heads.

782. In relation to the rest of Asia, India may be described as an area of mainly long-headed people separated by the Himalayas and its off-shoots from the Mongolian country, where the broad-headed types are more numerous and more pronounced than anywhere else in the world. At either end of the mountain barrier, broad heads are strongly represented in Assam and Burma on the east, and in Baluchistan on the west, and the same character occurs in varying degrees in the lower Himalayas and in a belt of country on the west of India extending from Gujarat through the Deccan to Coorg, the precise limits of which it is not yet possible to define. In the Punjab, Rajputana, and the United Provinces long heads predominate, but the type gradually changes as we travel eastward. In Bihar medium heads prevail on the whole, while in certain of the Bengal groups a distinct tendency towards brachy-cephaly may be observed, which shows itself in the Muhammadans and Chandals of Eastern Bengal, is more distinctly marked in the Kāyasths, and reaches its maximum development among the Bengal Brāhmans. In Peninsular India south of the Vindhya ranges the prevalent type seems to be mainly long-headed or medium-headed, short heads appearing only in the western zone of country referred to above. But the population of the coast has been much affected by foreign influence, Malayan or Indo-Chinese on the east, Arab, Persian, African, European and Jewish on the west, and the mixed types thus produced cannot be brought under any general formula.

783. The proportions of the nose are determined on the same principle as those of the skull. The height and breadth are measured from certain specified points, and the latter dimension is expressed as a percentage of the former. The nasal index, therefore, is simply the relation of the breadth of the nose to its height. If a man's nose is as broad as it is high—no infrequent case among the Dravidians—his index is 100. The results thus obtained are grouped in three classes—narrow or fine noses (leptorrhine) in which the width is less than 70 per cent. of the height; broad noses (platyrrhine) in which the proportion rises to 85 per cent. and over, and medium noses (mesorrhine) with an index of from 70 to 85. The index, as Topinard points out, expresses with great accuracy the extent to which the nostrils have been expanded and flattened out or contracted and refined, the height in the two cases varying inversely. It thus represents very distinctly the personal impressions which a particular type conveys to the observer. The broad nose of the Negro or the typical Dravidian is his most striking feature, and the index records its proportions with unimpeachable accuracy. Where races with different nasal proportions have intermixed the index marks the degree of crossing that has taken place; it records a large range of variations; and it enables us to group types in a serial order corresponding to that suggested by other characters.

For these reasons the nasal index is accepted by all anthropologists as one of the best tests of racial affinity.

Now form
in India

784 Speaking generally, it may be said that the broad type of nose is most common in Madras, the Central Provinces and Chota Nagpur; that fine noses in the strict sense of the term are confined to the Punjab and Baluchistan, and that the population of the rest of India tends to fall within the medium class. But the range of the index is very great. It varies in individual cases from 122 to 53, and the mean indices of different groups differ considerably in the same part of the country. The average nasal proportions of the Māl Pahārīā tribe of Bengal are expressed by the figure 94·5, while the pastoral Gujars of the Punjab have an index of 66·9, the Sikhs of 68·8 and the Bengal Brāhmans and Kāyasths of 70 1. In other words, the typical Dravidian, as represented by the Māl Pahārīā, has a nose as broad in proportion to its length as the Negro, while this feature in the Indo-Aryan group can fairly bear comparison with the noses of sixty-eight Parisians, measured by Topinard, which gave an average of 69 4. Even more striking is the curiously close correspondence between the gradations of racial type indicated by the nasal index and certain of the social data ascertained by independent inquiry. If we take a series of castes in Bengal, Bihar, the United Provinces of Agra and Oudh, or Madras, and arrange them in the order of the average nasal index, so that the caste with the finest nose shall be at the top, and that with the coarsest at the bottom of the list, it will be found that this order substantially corresponds with the accepted order of social precedence. Thus in Bihar or the United Provinces the casteless tribes, Kols, Korwās, Mundas, and the like, who have not yet entered the Brahmanical system, occupy the lowest place in both series. Then come the vernun-eating Musahais and the leather dressing Chamars. The fisher castes Bauri, Bind, and Kewat are a trifle higher in the scale; the pastoral Goālā, the cultivating Kurmi, and a group of cognate castes from whose hands a Brāhman may take water, follow in due order, and from them we pass to the trading Khatris, the landholding Bābhans and the upper crust of Hindu society. Thus, for those parts of India where there is an appreciable strain of Dravidian blood it is scarcely a paradox to lay down as a law of the caste organization that the social status of the members of a particular group varies in inverse ratio to the mean relative width of their noses. Nor is this the only point in which the two sets of observations—the social and the physical—bear out and illustrate each other. The character of the curious matrimonial groupings for which the late Mr. J. F. McLennan devised the useful term exogamous also varies in a definite relation to the gradations of physical type. Within a certain range of nasal proportions, these sub-divisions are based almost exclusively on the totem. Along with a somewhat finer form of nose groups called after villages and larger territorial areas, or bearing the name of certain tribal or communal officials, begin to appear, and above these again we reach the eponymous saints and heroes who in India, as in Greece and Rome, are associated with a certain stage of Aryan progress.

The nasal
index

Its corre-
spondence
with social
groupings

The orbi-
nasal index
a test of
Mongolian
affinities

785 The comparative flatness of the Mongolian face is a peculiarity which cannot fail to strike the most casual observer. On closer examination this characteristic will be seen to be closely connected with the formation of the cheek-bones, the margins of the bony sockets of the eyes, and the root of the nose. No precise measurements can be made of the cheek-bones on the living subject, for it is impossible to fix any definite points from which the dimension can be taken. A method however, was devised by Mr. Oldfield Thomas some years ago of measuring the relative projection of the root of the nose above the level of the eye-sockets, which expresses very accurately the degree of flatness of face met with in different types. It was used by him for skulls, but it has the great advantage of being equally applicable to living persons and at Sir William Flower's suggestion it has been extensively used in India, especially among hill tribes and wherever there was reason to suspect an intermixture of Mongolian blood. The principle on which it proceeds can be described without resorting to technical language. Any one who looks at a Gurkha in profile will readily observe that the root of the nose rises much less above the level of the eye-sockets than is the case with Europeans or natives of Upper India. The object is to determine the comparative elevation of the lowest point on the root of the nose above the plane of the eye-sockets. This is done by marking a point on

the front surface of the outer edge of each orbit and a third point on the centre of the root of the nose where it is lowest. The distance between the two orbital dots is then measured in a direct line and also the distance from each of these to the dot on the bridge of the nose. The former dimension represents the base of a triangle, the latter its two sides. The index is formed by calculating the percentage of the latter breadth on the former. If, as is sometimes the case, the bridge of the nose is let down so low that it does not project at all beyond the level of the orbits, the two dimensions will obviously be of equal length and the index will be 100. If, on the other hand, the elevation of the bridge of the nose is marked the index may be as high as 127 or 130. In the paper already referred to, which dealt only with skulls, Mr. Thomas proposed the division of the index into three classes.—

Platyopic	.	.	.	.	.	.	.	.	below 107.5.
Mesopic	.	.	.	.	.	.	.	.	107.5 to 110.0.
Proopic	.	.	.	.	.	.	.	.	above 110.0

The experience gained in India, which extends to a large number of castes and tribes in all parts of the country, has led me to adopt the following grouping for the living subject —

Platyopic	.	.	.	.	.	.	.	below 110
Mesopic	.	.	.	.	.	.	.	110 to 111.9
Proopic	.	.	.	.	.	.	.	112 and over

This brings the Mongoloid people of Assam and the Eastern Himalayas within the platyopic group, and effectually differentiates them from the broad-headed races of Baluchistan, Bombay and Coorg. It also separates the Indo-Aryans from the Aryo-Dravidians.

786 Topinard's classification of stature, which is generally accepted, comprises four groups.—

Tall statures 170 c.m.	(5' 7")	and over	
Above the average 165 c.m.	(5' 5")	and under 170 c.m.	(5' 7")
Below the average 160 c.m.	(5' 3")	and under 165	(5' 5")
Small statures	under	160 c.m.	(5' 3")

Stature in
Europe and
India

Much has been written on the subject of the causes which affect the stature. The general conclusion seems to be that in Europe the question is a very complicated one and that the influence of race is to a great extent obscured by other factors, such as climate, soil, elevation, food supply, habits of life, occupation, and natural or artificial selection. Most of these causes also come into play in India, but not necessarily to the same extent as in Europe. The influence of city life, which in civilised countries as a rule tends to reduce the stature and to produce physical degeneracy, is comparatively small in India where from fifty to eighty-four per cent. of the population are engaged in agriculture and live an outdoor life. Nor are the conditions of factory industries in India so trying or so likely to affect growth as in Europe. The operatives do not attend so regularly nor do they work so hard, and many of them live in the country for a great part of the year, coming into the mills only during the slack season for agriculture. Some of the indigenous hand-loom weavers, however, show the lowest mean stature yet recorded—a fact which is probably due to the unwholesome conditions in which they live. In India as in Europe the dwellers in the hills are generally shorter than the people of the plains, and within the hill region it may in either case be observed that the stature is often greater at high than at moderate altitudes—a fact which has been ascribed to the influence of rigorous climate in killing off all but vigorous individuals. In India the prevalence of malaria in the lower levels and the less healthy conditions of life would probably tend to bring about the same result. On the whole, however, the distribution of stature in India seems to suggest that race differences play a larger part here than they do in Europe. The tallest statures are met in Baluchistan, the Punjab, and Rajputana, and a progressive decline may be traced down the valley of the Ganges until the lowest limit is reached among the Mongoloid people of the hills bordering on Assam. In the south of India the stature is generally lower than in the plains of the north. The minimum is found among the Negritos of the Andaman islands, whose mean stature is given by Deniker as 1485 m.m., or 4 feet 10½ inches.

The seven
physical
types

787 These physical data enable us to divide the people of the Indian Empire into seven main physical types, the distribution of which is shown in the coloured map at the end of this chapter. If we include the Andamanese, the number of types is eight, but for our present purpose this tiny group of Negritos may be disregarded. Curious and interesting as they are from the point of view of general anthropology, the Andamanese have had no share in the making of the Indian people. They survive—a primitive outlier—on the extreme confines of the Empire to which they belong merely by virtue of the accident that their habitat has been selected as a convenient location for a penal settlement. I have, however, thought it worth while to take this opportunity of publishing the measurements of 200 Andamanese, 100 males and 100 females, which were taken some years ago by Captain Molesworth, then Surgeon at Port Blair, in the hope that they may be of service to any one who has the leisure to undertake a monograph on the subject.

788 Counting from the western frontier, we may determine the following distinctive types —

I. The *Turko-Iranian* type, represented by the Baloch, Brāhūi, and Afghāns of the Baluchistan Agency and the North-West Frontier Province. Probably formed by a fusion of Turki and Persian elements in which the former predominate. Stature above mean, complexion fair, eyes mostly dark, but occasionally grey; hair on face plentiful; head broad, nose moderately narrow, prominent, and very long.

II. The *Indo-Aryan* type, occupying the Punjab, Rajputana, and Kashmir and having as its characteristic members the Rājputs, Khātris, and Jāts. This type approaches most closely to that ascribed to the traditional Aryan colonists of India. The stature is mostly tall; complexion fair, eyes dark; hair on face plentiful; head long; nose narrow and prominent, but not specially long.

III. The *Scytho-Dravidian* type of Western India comprising the Marāthā Brāhmans, the Kunbis, and the Coorgs. Probably formed by a mixture of Scythian and Dravidian elements, the former predominating in the higher groups, the latter in the lower. The head is broad, complexion fair; hair on face rather scanty; stature medium, nose moderately fine and not conspicuously long.

IV. The *Aryo-Dravidian* type found in the United Provinces of Agra and Oudh, in parts of Rajputana, in Bihar and Ceylon, and represented in its upper strata by the Hindustani Brāhman and in its lower by the Chamār. Probably the result of the intermixture, in varying proportions, of the Indo-Aryan and Dravidian types, the former element predominating in the lower groups and the latter in the higher. The head-form is long with a tendency to medium, the complexion varies from lightish brown to black; the nose ranges from medium to broad, being always broader than among the Indo-Aryans, the stature is lower than in the latter group, usually below the average by the scale given above.

V. The *Mongolo-Dravidian* type of Lower Bengal and Orissa, comprising the Bengal Brāhmans and Kāyasths, the Muhammadans of Eastern Bengal, and other groups peculiar to this part of India. Probably a blend of Dravidian and Mongoloid elements with a strain of Indo-Aryan blood in the higher groups. The head is broad, complexion dark; hair on face usually plentiful; stature medium, nose medium with a tendency to broad.

VI. The *Mongoloid* type of the Himalayas, Nepal, Assam, and Burma represented by the Kānaks of Lahoul and Kulu, the Lepchas of Darjeeling, the Tambus, Murnis, and Guriangs of Nepal, the Bodo of Assam, and the Burmese. The head is broad; complexion dark with a yellowish tinge, hair on face scanty; stature small or below average, nose fine to broad; face characteristically flat; eyelids often oblique.

VII. The *Dravidian* type extending from Ceylon to the valley of the Ganges and pervading the whole of Madras, Hyderabad, the Central Provinces, most of Central India, and Chota Nagpur. Its most characteristic representatives are the Paniyans of the South Indian hills and the Santāls of Chota Nagpur. Probably the original type of the population of India, now modified to a varying extent by the admixture of Aryan, Scythian, and Mongoloid elements. In typical specimens the stature is short or below mean; the

complexion very dark, approaching black; hair plentiful with an occasional tendency to curl; eyes dark; head long; nose very broad, sometimes depressed at the root, but not so as to make the face appear flat.

789. Before proceeding to describe the types in further detail a few words of preliminary explanation are essential. In the first place, it must be clearly understood that the areas occupied by the various types do not admit of being defined as sharply as they are shown on the map. They melt into each other insensibly, and although at the close of a day's journey from one ethnic tract to another an observer whose attention had been directed to the subject would realize clearly enough that the physical characteristics of the people had undergone an appreciable change, he would certainly be unable to say at what particular stage in his progress the transformation had taken place. Allowance, therefore, must be made for the necessary limitations of map-making, and it must not be supposed that a given type comes to an end as abruptly as the patch of colour denoting the area of its maximum prevalence. Secondly, let no one imagine that any type is alleged to be in exclusive possession of the locality to which it is assigned. When for example, Madras is described as a Dravidian and Bengal as a Mongolo-Dravidian tract, that does not mean that all the people of Madras and Bengal must of necessity belong to the predominant type. From time immemorial a stream of movement in India has been setting from west to east and from north to south—a tendency impelling the higher types towards the territories occupied by the lower. In the course of this movement representatives of the Indo-Aryan type have spread themselves all over India as conquerors, traders, landowners, or priests, preserving their original characteristics in varying degrees, and receiving a measure of social recognition dependent in the main on the supposed purity of their descent from the original immigrants. Family and caste traditions record countless instances of such incursions, and in many cases the tradition is confirmed by the concurrent testimony of historical documents and physical characteristics. Even in the provinces farthest removed from the Indo-Aryan settlements in North-Western India, members of the upper castes are till readily distinguishable by their features and complexion from the mass of the population, and their claims to represent a different race are thrown into relief by the definition now for the first time attempted of the predominant type of the province. Until the existence of a lower type has been established no special distinction is involved in belonging to a higher one. Thirdly, it may be said that the names assigned to the types beg the highly speculative question of the elements which have contributed to their formation. The criticism is unanswerable. One can but admit its truth, and plead by way of justification that we must have some distinctive names for our types, that names based solely on physical characters are practically mere bundles of formulæ, and that if hypotheses of origin are worth constructing at all one should not shrink from expressing them in their most telling form.

790. The *Turko-Iranian* type is in practically exclusive possession of Baluchistan and the North-West Frontier Province. Its leading characteristics are the following —

(i) The head is broad, the mean indices ranging from 80 in the Baluch of the Western Punjab to 85 in the Hazāra of Afghanistan. I put aside as doubtful cases the Hunzas, Nāgars, and Kāshgārs and the Pathāns of the North-Western Punjab. For the first three the data are scanty and it is possible that further enquiry might lead to their inclusion in the Indo-Aryan group. In the case of the latter the individual indices vary from 69 to 87, and although broad heads preponderate on the whole, there is a sufficient proportion of long heads to warrant the suspicion of some mixture of blood.

(ii) The proportions of nose (nasal index) are fine or medium, the average indices running from 67.8 in the Tarin to 80.5 in the Hazāra. Some of the individual indices are high and one Hazāra attains the remarkable figure of 111. These abnormalities may probably be accounted for by the importation of Abyssinian slaves. The proportions of the nose, however, are less distinctive of the types than its great absolute length, which varies in individual cases from 56 m.m. among the Hazāras to 65 among the Brāhūi. The one feature indeed that strikes one in these people is the portentous length of their noses, and it is probably this peculiarity that has given rise to the tradition of the

Limitations
of the
scheme

(1) The Turko-
Iranian type

Jewish origin of the Afghāns. Some of the Scythian coins exhibit it in a marked degree. As M. Ujfalvy* has pointed out, the lineaments of Kadphises II survive in the Dards of to-day, and the remark holds good of most of the people whom I have ventured to include in the Turko-Iranian type.

(iii) The mean orbito-nasal index, which measures the relative flatness of the face, ranges with the Turko-Iranians from 111 in the Hazāra to 118 in the Baloch, Brāhui, and Dehwār. The highest individual index (131) occurs among the Pathāns of the North-Western Punjab and the lowest (118) among the Kāfirs. The type as a whole is conspicuously pro-opic, and there are no signs of that depression of the root of the nose and corresponding flatness of the cheek bones to which the appearance popularly described as Chinese or Mongolian is due. In respect of this character the Hazāras seem to be an exception. In them the individual indices form a continuous curve of striking regularity from 103 to 120, and it is a question whether the tribe ought not to be included in the Mongoloid type. I prefer, however, to show them as Turko-Iranian, for it seems possible that they partake of the elements of both types and represent the points of contact between the two.

(iv) The average stature varies from 162 in the Baloch of Makran to 172 in the Achakzai Pathān of northern Baluchistan. The figure for the Hazāra is 168 which makes for their inclusion in the Turko-Iranian rather than in the Mongoloid group, but the subjects measured belonged to one of the regiments at Quetta and were probably rather above the average stature of the tribe.

(11) The
Indo-Aryan
type

791. The *Indo-Aryan* type predominates in Rajputana, the Punjab, and the Kashmir valley, though in parts of these areas it is associated to a varying extent with other elements. It is readily distinguishable from the Turko-Iranian. Its most marked characteristics may be summarised as follows:—

(i) The head-form is invariably long, the average index ranging from 72.4 in the Rājput to 74.4 in the Awān. The highest individual index (86) is found among the Khātris and the lowest (64) among the Rājputs. The seriations bring out very clearly the enormous preponderance of the long-headed type and present the sharpest contrast with those given for the Turko-Iranians.

(ii) In respect of the proportions of the nose there is very little difference between the two types. The Indo-Aryan index ranges from 66.9 in the Gujar to 75.2 in the Chuhārā, and there are fewer high individual indices, but between the seriations there is not much to choose. On the other hand the Indo-Aryans, notwithstanding their greater stature, have noticeably shorter noses than the Turko-Iranians.

(iii) Concerning the orbito-nasal index there is little to be said. All the members of the Indo-Aryan type are placed by their average indices within the pro-opic group, their faces are free from any suggestion of flatness and the figures expressing this character run in a very regular series. The highest index (117.9) occurs among the Rājputs and the lowest (113.1) amongst the Khātris.

(iv) The Indo-Aryans have the highest stature recorded in India, ranging from 174.8 in the Rājput to 165.8 in the Ārora. Individual measurements of Rājputs rise to 192.4 and of Jāts (Sikhs) to 190.5. Stature alone, therefore, were other indications wanting, would serve to differentiate the Indo-Aryan from the Aryo-Dravidian type of the United Provinces and Bihar.

The most important points to observe in the Indo-Aryan series of measurements are the great uniformity of type and the very slight differences between the higher and the lower groups. Socially, no gulf can be wider than that which divides the Rājputs of Udaipur and Mewār from the scavenging Chuhārā of the Punjab. Physically, the one is cast in much the same mould as the other; and the difference in mean height which the seriations disclose is no greater than might easily be accounted for by the fact that in respect of food, occupation, and habits of life the Rājput has for many generations enjoyed advantages, telling directly on the development of stature, which circumstances have denied to the Chuhārā. Stature we know to be peculiarly sensitive to external influences of this kind. Other and more subtle influences re-act upon environment and tend to modify the type. Sikhism has transformed the despised Chuhārā into the soldierly Mazhabī. Who shall say that military service might not have the same effect on groups belonging to the lower social strata of the Punjab, whose physical endowment is hardly inferior to that observed at the top of the scale?

* L'Anthropologie, IX, 407. Mémoire sur les Huns blancs.

792 The *Scytho-Dravidian* type occurs in a belt of country on the west of India extending from Gujarat to Coorg. It is represented at one extreme of this belt by the Nāgar Brāhmins of Gujarat and at the other by the remarkable people who have given their name to the little province of Coorg. Excluding the Kātkaris, who belong to the Dravidian type, the leading characteristics of the Scytho-Dravidians are the following:—

(i) The head-form ranges from 76.9 in the Deshasth Brāhmins to 79.7 in the Nāgar Brāhmins and 79.9 in the Prabhus and the Coorgs, while the maximum individual indices rise as high as 92 with the Marāthā Kunbis and the Shenvi Brāhmins. In the case of the three type-specimens—the Nāgar Brāhmins, the Prabhus, and the Coorgs—the mean index is virtually 80 and the predominance of the broad-headed type is unmistakable. The seriations show that the gradations of type are fairly regular and a comparison with the diagrams of the Indo-Aryans brings out marked differences of head-form, where the features and complexion taken by themselves would appear to point to an identical origin. Both indices and maxima are noticeably lower than among the Turko-Iranians.

(ii) In the proportions of the nose there is nothing much to remark. The mean indices vary from 72.0 in the Coorg to 81.9 in the Mahār, the Nāgar Brāhmin giving 73.1 and the Prabhu 75.8. The length of the nose, whether we look to the averages or the maxima, is distinctly less than among the Turko-Iranians, the type most closely allied to the Scytho-Dravidian.

(iii) The mean orbito-nasal index varies from 113.1 in the Sōn Koli to the very high figure of 120 in the Coorg. It deserves notice, however, that the minimum indices run very low, and that the range between the highest maximum (132) and the lowest minimum (103) is considerable and points to some mixture of blood.

(iv) The mean stature varies from 160 in the case of the Kunbis to 168.7 in the Coorgs and an examination of the figures will show that it is on the whole lower than among the Turko-Iranians.

The type is clearly distinguished from the Turko-Iranian by a lower stature, a greater length of head, a higher nasal index, a shorter nose and a lower orbito-nasal index. All of these characters, except perhaps the last, may be due to a varying degree of intermixture with the Dravidians. In the higher types the amount of crossing seems to have been slight; in the lower the Dravidian elements are more pronounced, while in the Kātkari the long head and wide nose are conspicuous.

793. The *Aryo-Dravidian* or *Hindustani* type extends from the Eastern frontier of the Punjab to the southern extremity of Bihar, from which point onwards it melts into the Mongolo-Dravidian type of Bengal Proper. It occupies the valleys of the Ganges and Jumna and runs up into the lower levels of the Himalayas on the north and the slopes of the Central India plateau on the south. Its higher representatives approach the Indo-Aryan type, while the lower members of the group are in many respects not very far removed from the Dravidians. The type is essentially a mixed one, yet its characteristics are readily definable and no one would take even an upper class Hindustani for a pure Indo-Aryan or a Chamār for a genuine Dravidian. Turning now to details we find the following results:—

(i) The head-form is long with a tendency towards medium. The average index varies from 72.1 in the Kāchi and Kōri of Hindustan to 76.8 in the Dosādh of Bihar and 76.7 in the Bābhān. The highest individual index (90) occurs among the Bābhāns of Bihar and the lowest (72) among the Bhāns of Hindustan. But the head-form throws little light on the origin and affinities of the type and would of itself barely serve to distinguish the Aryo-Dravidian from the Indo-Aryan. Nor, indeed, would one expect it to do so, for the pure Dravidians are themselves a long-headed race, and the Hindustani people might equally well have derived this character from the Dravidian element in their parentage.

(ii) The distinctive feature of the type, the character which gives the real clue to its origin and stamps the Aryo-Dravidian as racially different from the Indo-Aryan, is to be found in the proportions of the nose. The average index runs in an unbroken series from 73.0 in the Bhuinhār of Hindustan and 73.2 in the Brāhmin of Bihar to 86 in the Hindustani Chamār and 88.7 in

the Musahar of Bihar. The order thus established corresponds substantially with the scale of social precedence independently ascertained. At the top of the list are the Bhuinhārs who rank high among the territorial aristocracy of Hindustan and Bihar; then come the Brāhmans, followed at a slight but yet appreciable interval by the clerkly Kayasths with an index of 74·8; while down at the bottom the lower strata of Hindu society are represented by the Chamār, who tans hides and is credibly charged with poisoning cattle, and the foul-feeding Musahar who eats pigs, snakes and jackals and whose name is popularly derived from his penchant for field-rats. The seriations tell the same tale as the averages and mark the essential distinction between the Aryo-Dravidian and Indo-Aryan types. The Hindustani Brāhmans, with a slightly lower mean index than the Chuhrās of the Punjab, have a far larger proportion of the broad noses which point to an admixture of Dravidian blood.

(iii) The statistics of height lead to a similar conclusion. The mean stature of the Aryo-Dravidians ranges from 166 c.m. in the Brāhmans and Bhuinhārs to 159 in the Musahar, the corresponding figures in the Indo-Aryan being 174·8 and 165·8. The one begins where the other leaves off.

(v) The
Mongolo-
Dravidian
type

791. The *Mongolo-Dravidian* or *Bengali* type occupies the delta of the Ganges and its tributaries from the confines of Bihar to the Bay of Bengal. It is one of the most distinctive types in India, and its members may be recognized at a glance throughout the wide area where their remarkable aptitude for clerical pursuits has procured them employment. Within its own habitat the type extends to the Himalayas on the north and the Province of Assam on the east and probably includes the bulk of the population of Orissa. The western limit coincides approximately with the hilly country of Chota Nagpur and Western Bengal.

(i) The broad head of the Bengali, of which the mean index varies from 79·0 in the Brāhman to 83·0 in the Rajbansi Magh, effectually differentiates the type from the Indo-Aryans or Aryo-Dravidians. The seriation of the cephalic index for the Brāhmans of East Bengal is very regular in its gradations and presents a striking contrast with the corresponding diagrams for the Hindustani Brāhmans and the Rājput. Here, as elsewhere, the inferences as to racial affinity suggested by the measurements are in entire accord with the evidence afforded by features and general appearance. For example, it is a matter of common knowledge that the Rajbansi Magh, of Chittagong who is in great demand as a cook in European households in India and usually prospers exceedingly, resembles the upper class Bengali of Eastern Bengal so closely that it takes an acute observer to tell the difference between the two.

(ii) The mean proportions of the nose range from 70·3 in the Brāhmans and Kayasths to 84·7 in the Māls of Western Bengal and 80 in the Kochh. The number of high individual indices brings out the contrast with the Indo-Aryan and points to the infusion of Dravidian blood. In the Brāhman seriation the finer forms predominate, and it is open to any one to argue that, notwithstanding the uncompromising breadth of the head, the nose form may in their case be due to the remote strain of Indo-Aryan ancestry to which their traditions bear witness.

(iii) The stature varies from 167 in the Brāhmans of Western Bengal to 159 in the Kochh of the Sub-Himalayan region.

The seriations of the Kochh deserve special notice for the indications which they give of the two elements. Socially they have combined to form the Mongolo-Dravidian type. In writing this paper twelve years ago I ventured, on the evidence then available, to cast in as a people of Dravidian stock who, being driven by pressure from the north, were brought into contact with the Mongoloid races of the lower Himalayas and the Assam border, with the result that their type was affected in a varying degree by intermixture with these races. On the whole, however, I thought that Dravidian characteristics predominated among them over Mongolian. My conclusions, which coincided in the main with those of Colonel Dalton and other observers, have recently been questioned by Lieutenant-Colonel Waddell, R.E., in a paper on the *Tribes of the Brahmaputra valley*.* Colonel Waddell, who has observed and measured

the Kochh both in North-Eastern Bengal and in Assam, denies their Dravidian origin and describes them as "distinctly Mongoloid though somewhat heterogeneous." For purposes of comparison I have included both his measurements and my own in the same diagram. As regards the head-form and the stature the two sets of observations are practically identical. In the case of the nose, Colonel Waddell's data show a far higher proportion of broad noses than mine, and clearly point to a strong Dravidian element. On the other hand, the orbito-nasal index exhibits, though in a less degree, some distinctive Mongoloid characteristics. One can ask for no better illustration of the efficacy of the method of Anthropometry in its application to a mixed or transitional type than the fact that, while two independent observers have formed different opinions as to the relative preponderance of its component elements, the data obtained by them from a separate series of individuals correspond to the remarkable extent indicated by the Kochh diagram. There is of course no real conflict of opinion between Colonel Waddell and myself. The whole question turns upon the point of view of the observer. Take the Kochh in Dinajpur and Rangpur and they strike you as in the main Dravidian; travel further east, and include in your survey the cognate Kachāri of Assam, and there is no mistaking the fact that Mongoloid characteristics predominate. The same may be said of the Bengali type as a whole: in Western Bengal the Dravidian element is prominent, in Dacca and Mymensingh the type has undergone a change which scientific methods enable us to assign to the effect of contact with a Mongolian race.

795 On its northern and eastern frontier India marches with the great Mongolian region of the earth. The effect of this contact with an almost exclusively broad-headed population is indicated in yellow on the map, and a glance will show how the area within which this particular foreign influence has impressed itself upon India widens gradually from west to east. The Punjab and Hindustan are left virtually untouched; the Bengalis exhibit a type sensibly modified in the direction of Mongolian characters; the Assamese are unmistakably Mongoloid; and in Burma the only non-Mongolian elements are the result of recent immigration from India. This condition of things is of course mainly due to the intervention of the great physical barrier of the Himalayas, "the human equator of the earth," as an American anthropologist* has called it, which throughout its length offers an impassable obstacle to the southward extension of the Mongolian races. But other causes also enter in. No one who is acquainted with the population of the Lower Himalayas can have failed to observe that in the west there has been a substantial intermixture of Indo-Aryan elements, while in the east the prevailing type down to the verge of the plains is exclusively Mongoloid. The reason seems to be that the warlike races of the Punjab and Hindustan invaded the pleasant places of the hills and conquered for themselves the little kingdoms which once extended from the Kashmir valley to the eastern border of Nepal. The Dogras or Hill Rājputs of Kangra, and the Khas of Nepal form the living record of these forgotten enterprises. Further east the conditions were reversed. Neither Bengalis nor Assamese have any stomach for fighting; they submitted tamely to the periodical raids of the hill people, and the only check upon the incursions of the latter was their inability to stand the heat of the plains. They occupied however, the whole of the lower ranges and held the Duārs or gates of Bhutan until dispossessed by us. Thus in the East Himalayas none of the plains people made good a footing within the hills, and the latter remain to this day in the exclusive possession of races of Koiri Mongoloid type. (vi) The Mongoloid type.

The summaries of the high reproduced in the volume of appendices relate to a fairly large group and the lowest and the type is distinct.

(1) The prevalent group shows little broad but the mean indices show some remarkable departures from the type. The Jaintia index is 72.9, thus falling within the long-headed category, and several tribes have indices between 75 and 80. These low indices are, however, based upon a comparatively small number of subjects and it seems not unlikely that a larger series of measurements may sensibly modify the average. In any case a great deal of work will have to be done before we are in a position to determine the probable

affinities of the numerous Mongoloid tribes who inhabit the hilly region between India and China.

(ii) The nose-form appears at first sight to show a great range of variations, but on closer examination it will be seen that the higher indices are for the most part confined to tribes represented by a comparatively small number of subjects. In the larger groups the mean index ranges from 87.2 for the Lepchās to 84.5 for the Chakmās and 86.3 for the Khāsias; the Tibetans (73.9) and the Murmis (75.2) falling between these extremes. The highest mean index 95.1 occurs among the Mānde or Gāro in one of whom, according to Lieutenant-Colonel Waddell, the width of the nose exceeds its height to an extent indicated by the surprising ratio of 117. But only 84 Gāros have been measured and looking to the possibilities of crossing one can scarcely regard the figures as conclusive. On the measurements given in the table there may be some question whether the Mānde should not be classed as Mongolo-Dravidian, and this view may be thought to derive some support from Buchanan's description of them as a wild section of the Kochh.

(iii) Under the head of stature there is nothing much to remark. The Gurungs (169.8) are the tallest and the Miris (156.4) the shortest of the tribes included in the table. The 106 Tibetans show an average of 163.3 which may be regarded as fairly typical. The tallest individuals (176) are found among the Tibetans and Murmis, the shortest (141) are Khambus, and Khāsias.

(iv) The characteristic orbito-nasal index, which measures the relative flatness or prominence of the root of the nose and the adjacent features, yields singularly uniform results. The average varies in the large groups, which alone are worth considering, from 106.4 in the Chakmā to 109.1 in the Tibetan. For the Lepchās, Lieutenant-Colonel Waddell's observations yield a mean index of 105.8, with a maximum of 119 and a minimum of 92, against my average of 108.1 ranging from 113 to 103. As my figures relate to a larger number of subjects (57 against 36), I have selected them in preference to his for inclusion in the diagram showing seriation. A glance at the diagrams given for the Lepchās of Darjeeling and the Chakmās of the Hill Tracts of Chittagong will show how regularly the gradations of the indices are distributed, and will bring out better than any description the correspondences and divergences of type.

796. The *Dravidian* race, the most primitive of the Indian types, occupies the oldest geological formation in India, the medley of forest-clad ranges, terraced plateaux, and undulating plains which stretches, roughly speaking, from the Vindhya to Cape Comorin. On the east and west of the peninsular area the domain of the Dravidian is conterminous with the Ghats; while farther north it reaches on one side to the Aravallis and on the other to the Rajmahal hills. Where the original characteristics have been unchanged by contact with Indo-Aryan or Mongoloid people the type is remarkably uniform and distinctive. Labour is the birthright of the pure Dravidian, and as a coolie he is in great demand wherever one meets him. Whether hoeing tea in Assam, the Duars and Ceylon, cutting rice in the swamps of Eastern Bengal, or doing scavenger's work in the streets of Calcutta, Rangoon, and Singapur, he is recognisable at a glance by his black skin, his squat figure and the negro-like proportions of his nose. In the upper strata of the vast social deposit which is here treated as Dravidian these typical characteristics tend to thin out and disappear, but even among them traces of the original stock survive in varying degrees. We must look to the researches of Mr. Thurston, who is conducting the Ethnographic Survey of Southern India to define and classify the numerous subtypes thus established, and to determine the causes which have given rise to them.

Turning now to the actual measurements we find the following specific characters:—

(i) The head-form is usually medium with a tendency in the direction of length. The mean indices range in Southern India from 71.7 in the Madaga of the Nilgiris and 72.9 in the Kattis of the Annamalai Hills to 73.6 in the Shānans of Tinnevely. The Kattis (73.3), Shānans (73.2), Cheruman (73.4), Palli (73), and several others also fall well within the mesocephalic group. In Central Nagpur, on

the other hand, the type is uniformly medium. Among the large groups the Chik (73.8), the Munda (74.5) and the Māle (74.8), the Khariā (74.5), and the Korwā (74.4) are just included in the long-headed division; while for all the others the mean index ranges about 75 and 76. In this part of India the physical conformation of the country, the vast stretches of fever-haunted jungle, the absence of roads, and the compact tribal organization and independent spirit of the Dravidian races have tended to preserve them singularly free from the intrusion of foreign influence, and for these reasons I believe that their measurements may be taken as fairly typical. The series given for the Santāls shows how regularly the individual indices are graduated.

(ii) In Southern India the mean proportions of the nose vary from 69.1 in the Lambādīs of Mysore and 73.1 in the Vellālas of Madras to 95.1 in the Paniyans of Malabar. In Chota Nagpur and Western Bengal the range of variation is less marked and the mean indices run from 82.6 in the Kurmi of Manbhūm in a gradually ascending series to 94.5 in the Māle of the Santāl Parganas. The Asur figure of 95.9 may be left out of account as it relates to only two subjects. In both regions the mean proportions of the nose correspond in the main to the gradations of social precedence, and such divergences as occur admit of being plausibly accounted for. At the head of the physical series in Southern India stand the Lambādi with a mean index of 69.1. They do not, however, employ the local Brāhmanas as priests and their touch is held to convey ceremonial pollution. But there is reason to believe that they are a nomadic people from Upper India, and that their social rank is low merely because they have not been absorbed in the social system of the South. Next come the Vellālas, the great cultivating caste of the Tamil country, with a mean index of 73.1. They are classed as *Sat* or pure Sudras; the Brāhmanas who serve them as priests will take curds and butter from their hands and will cook in any part of their houses. The Tamil Brāhmanas themselves belong, indeed, to a lower physical type; but their mean index of 76.7 has probably been affected by the inclusion in the group of some tribal priests, who obtained recognition as Brāhmanas, when their votaries insensibly became Hindus. Then follow the Palli (77.9) a large group mainly employed in agriculture, who claim twice-born rank and frequently describe themselves as *Agnikula* or fire-born Kshatriyas. Low down in the social as in the physical scale, are the Parāyan or Pariah, with an index of 80, whose mere vicinity pollutes, but whose traditions point to the probability that their status was not always so degraded as we find it at the present day. This conjecture derives some support from the fact that the Kadān, Mukkudan and Paniyan, with substantially broader noses, yet take higher social rank.

(iii) Among the Dravidians of Southern India the mean stature ranges from 170 in the Shānans of Tinnevely to 153 in the Pulaiyans of Travancore, and individual measurements vary from 182.8 in the former group to 143.1 in the latter. Mr. Thurston has drawn my attention to the well-marked correlation between stature and the proportions of the nose which is brought out by the following statement:—

	Mean Stature.	Mean nasal index.
Agamudaiyan	165.8	74.2
Badaga	161.7	74.6
Tujan		
Tamil Brāhman		
Palli		
Tamil Parāyan	162.1	80.4
Irula	159.9	80.4
Kadir	157.7	89.8
Paniyan	157.7	95.1

In Chota Nagpur and Western Bengal the stature is more uniform, varying from 182.7 in the Oraon of Ranchi to 157.7 in the Santāl Parganas, and the correlation with the proportions of the nose, though traceable, is less distinct.

The origins of these types are hidden in remote antiquity, and the Aryans advance into India. The problem of origins is dimly revealed in the dim region of conjecture, aided by the fragments of the East warrants us in making that in those distant ages types were formed by much the same processes as

those that we find in operation to-day. Such are our materials for a study of the evolution of the Indian people. At the best the picture can present but shadowy outlines; all that can be demanded of it is that it should accord in the main with the scanty data furnished by what passes for history in India and at the same time should offer a consistent and plausible explanation of the ethnic conditions which prevail at the present time.

The Dravidian type

798. The oldest of the seven types is probably the Dravidian. Their low stature, black skin, long heads, broad noses, and relatively long fore-arm, distinguish them from the rest of the population and appear at first sight to confirm Huxley's surmise that they may be related to the aborigines of Australia. Linguistic affinities, especially the resemblance between the numerals in Mundāri and in certain Australian dialects, and the survival of some abortive forms of the boomerang in Southern India, have been cited in support of this view, and an appeal has also been made to Scclater's hypothesis of a submerged continent of Lemuria, extending from Madagascar to the Malay archipelago, and linking India with Africa on the one side and Australia on the other. But Sir William Turner's comparative study of the characters of Australian and Dravidian crania has not led him to the conclusion that these data can be adduced in support of the theory of the unity of the two peoples. The facts which cast doubt on the Australian affinities of the Dravidians finally refute the hasty opinion which seeks to associate them with the tiny, broad-headed, and woolly-haired Negritos of the Andamans and the Philippines. This is the last word of scientific authority, and here we might leave the subject, were it not that another theory of the origin of the Dravidians was adopted by Sir William Hunter in the account of the non-Aryan races of India given by him in *The Indian Empire*. According to this view there are two branches of the Dravidians—the Kolarians, speaking dialects allied to Mundāri, and the Dravidians proper, whose languages belong to the Tamil family. The former entered India from the North-East and occupied the northern portion of the Vindhya table-land. There they were conquered and split into fragments by the main body of Dravidians who found their way into the Punjab through the North-Western passes and pressed forward towards the South of India. The basis of this theory is obscure. Its account of the Dravidians seems to rest upon a supposed affinity between the Brāhui dialect of Baluchistan and the languages of Southern India; while the hypothesis of the North-Eastern origin of the Kolarians depends on the fancied recognition of Mongolian characteristics among the people of Chota Nagpur. But in the first place the distinction between Kolarians and Dravidians is purely linguistic and does not correspond to any differences of physical type. Secondly, it is extremely improbable that a large body of very black and conspicuously long-headed types should have come from the one region of the Earth, which is peopled exclusively by races with broad heads and yellow complexions. With this we may dismiss the theory which assigns a trans-Himalayan origin to the Dravidians. Taking them as we find them now it may safely be said that their present geographical distribution, the marked uniformity of physical characters among the more primitive members of its group, their animistic religion, their distinctive languages, their stone monas black skin, their retention of a primitive system of totemism justify us in the upper strata of the earliest inhabitants of India of whom we have any these typical characteristics.

The Indo-Aryan type

799. Upon traces of this discussion known as the Aryan controversy there is no need to enter here. Whether anything that can properly be described as an Aryan race ever existed; whether the heads of its members were long, according to Penka, or short according to Sergi; whether its original habitat was Scandinavia, the Lithuanian Steppe, South-Eastern Russia, Central Asia, or India itself, as various authorities have held; or again whether the term Aryan is anything more than a philological expression denoting the heterogeneous group of people whose languages belong to the Aryan family of speech—these are questions which may for our present purpose be left unanswered. We are concerned merely with the fact that there exists in the Punjab and Rajputana at the present day, a definite physical type, represented by the Jats and Rajputs, which is marked by a relatively long (dolichocephalic) head; a straight, finely cut (leptorhine) nose; a long, symmetrically narrow face; a well developed

forehead, regular features, and a high facial angle. The stature is high and the general build of the figure is well proportioned, being relatively massive in the Jāts and relatively slender in the Rājputs. Throughout the group the predominant colour of the skin is a very light transparent brown, with a tendency towards darker shades in the lower social strata. Except among the Meos and Minās of Rājputana, where a strain of Bhil blood may perhaps be discerned, the type shows no signs of having been modified by contact with the Dravidians; its physical characteristics are remarkably uniform; and the geographical conditions of its habitat tend to exclude the possibility of intermixture with the black races of the South. In respect of their social characters the Indo-Aryans, as I have ventured to call them, are equally distinct from the bulk of the Indian people. They have not wholly escaped the contagion of caste; but its bonds are less rigid here than elsewhere; and the social system retains features which recall the more fluid organization of the tribe. Marriage in particular is not restricted by the hard and fast limits which caste tends to impose but is regulated within large groups by the principle of hypergamy or 'marrying up' which was supposed to govern the connubial relations of the four original classes (*varna*) in the system described by Manu. Even now Rājputs and Jāts occasionally intermarry, the Rājputs taking wives from the Jāts but refusing to give their own maidens in return. What is the exception to day is said to have been the rule in earlier times. In short, both social and physical characters are those of a comparatively homogeneous community which has been but little affected by crossing with alien races.

800. The uniformity of the Indo-Aryan type can be accounted for only by one of two hypotheses (1) that its members were indigenous to the Punjab, (2) that they entered India in a compact body or in a continuous stream of families from beyond the North-West Frontier. It is clear that they cannot have come by sea, and equally clear that they could not have found their way into India round the Eastern end of the Himalayas. The theory that the Punjab was the cradle of the Aryan race was propounded by Mr. A. Curzon* about fifty years ago on the basis of some rather crude linguistic speculations, but it met with no acceptance and the opinion of European scholars from Von Schlegel down to the present time is unanimous in favour of the foreign origin of the Indo-Aryans. The arguments appealed to are mainly philological. Vedic literature, indeed, as Zimmer† admits, throws but scanty light upon the subject, for no great weight can be laid upon the identification of the river Basā with the Araxes, the name by which the Jaxartes was known to Herodotus. Following authority, however, we may assume for our present purpose that the ancestors of the Indo-Aryans came into India from the north-west, and that at the time of their arrival the peninsula, as far as the valley of the Ganges and Jumna, was in the possession of the Dravidians. The only indication of the latter people having extended further to the west, is to be found in the survival of Brahui, an island of supposed Dravidian speech, among the Iranian languages of Baluchistan. But the present speakers of Brāhui are certainly not Dravidians by race; and we find no traces of Dravidian blood among the Indo-Aryans of to-day. It seems probable, therefore, that when the Indo-Aryans entered the Punjab they brought their own women with them, and were not reduced to the necessity of capturing Dravidian brides. On no other supposition can we explain the comparative purity of their type.

801. Now if the physical and social conditions of the Indian Borderland had been the same in those remote ages as we find them at the present day, it is difficult to see how the slow advance of family or tribal migration could have proceeded on a scale large enough to result in an effective occupation of the Punjab. The frontier strip itself, a mere tangle of barren hills and narrow valleys, is ill adapted to serve as an *officina gentium*; while a pastoral people moving by clans or families from more favoured regions further west would have found their way barred by obstacles which only the strongest members of the community could have surmounted. The women and children must have been left behind or they would have perished by the way. Again, given the present rainfall and climate of the countries adjacent to India, where should we find to-day, within a measurable distance of the frontier, the favoured region that would give off

the swarm of emigrants required to people the Punjab? Surely not in South-Eastern Persia, with its inhospitable deserts of shifting sand; nor on the dreary Central Asian steppes where only a scanty nomadic population finds a meagre subsistence. But is it certain that during the three or four thousand years that may have elapsed since the Aryans began to press forward into India the climate of the countries through which they passed may not have undergone a material change? There is a certain amount of evidence, the value of which I am anxious not to overrate, in favour of this supposition. Mr. W. T. Blanford, writing in 1873* thought it probable that the rainfall both in Central Asia and Persia had fallen off greatly in modern times, and that owing mainly to this cause, and in a less degree to the destruction of trees and bushes, the climate had become appreciably drier, cultivation had fallen off and the population had greatly declined in numbers. Nearly thirty years later, we find Mr. Blanford's views confirmed and developed by Mr. E. Vredenburg in his *Geological Sketch of the Baluchistan Desert and part of Eastern Persia*†. Mr. Vredenburg applies to the problem the known principles of physical geography and shows how, given a dwindling rainfall, in a tract situated like Eastern Persia and Baluchistan evaporation is bound to produce the present condition of perennial drought. As the rainfall declines fertile plains relapse into deserts; lakes are transformed into hideous salt marshes; the springs in the hills dry up and an era of desolation sets in. No human agency however corrupt, no mere mis-government however colossal, could bring about such widespread disaster. The village communities, give them but earth and water, would outlast the conqueror and the marauder, as they have done in India. The forces of nature alone could defeat their patient industry. It is the great merit of Mr. Vredenburg's paper that it indicates the true cause of the facts observed and exposes the fallacy of the belief, countenanced by a long series of travellers, that oriental inertia and corruption are chiefly answerable for the present condition of Baluchistan. In illustration of the state of things which must have existed in some former age he tells us how in the desolate valleys of the State of Kharian there exist hundreds of stone walls, known locally as *gorhands* or "dams of the infidels," which mark the edges of ancient terraced fields and retain even now remnants of soil which once was cultivated. A legend still survives that the builders of these walls carried the earth in bags on their backs from the alluvial desert to the south, a form of labour which the indolent Baloch regards as degrading to the dignity of a man. Toil of this sort, whether the soil was transported by beasts of burden or by men, can only have been undertaken in the certain hope of a substantial return. No one would construct fields in a rainless wilderness of ravines, or build walls which have lasted for centuries to retain water where water there was none. Nor is it likely that the cultivation was confined to the hills. Arguing from what one sees in India it seems far more likely that these terraced fields represent the overflow of a flourishing agricultural community driven up into the hills by the pressure of population in the plains. Gradually as the climate changed, the level alluvial tracts, deprived of rainfall, lapsed into desert; the bulk of the population drifted on into the Punjab while those who remained behind turned their ploughshares into swords and eked out by pillage the meagre livelihood to be won from patches of soil in the hills. Last of all, the springs on which this scanty cultivation depended shrunk and disappeared, till nothing was left but the stone walls to recall the labours of the forgotten people who built them.

802 The picture, which these observations enable us to construct, of a country of great lakes and fertile plains extending from the centre of Persia to the western confines of India, or let us say from the Dasht-i-Kavir in Western Khorasan to the deserts of Registan and Kharian, may help to throw light upon the problem of the Indo-Aryan advance into the Punjab. The population of such a tract, as they began to press on their own means of subsistence or were pushed forward by incursions from the west, would naturally have moved on by tribes and families without any disturbance of their social order, and would have occupied the valley of the Indus. Arriving there as an organized society, like the children of Israel when they entered Palestine, they would have had no need and no

* Quart. Jour. Geol. Soc., XXIX (1873.)

† Mem. Geol. Survey of India, XXXI, Pt. 2.

temptation to take to themselves any Dravidian daughters of Heth, and they would have preserved their type as distinct as we find it in the Punjab to-day. The movement must of course have been gradual and must have extended over many centuries, during which time the climate continued to dry up and the possibilities of agriculture to decline. When the new conditions had become fully established the North-Western Frontier of India was closed to the slow advance of family or tribal migration and remained open only to bands of fighting men or adventurous nomads, who could force their way through long zones of waterless deserts ending in a maze of robber-haunted hills. Armed invasion took the place of peaceful colonization. But the invaders, however great their strength, could in any case bring relatively few women in their train. This is the determining factor both of the ethnology and of the history of India. As each wave of conquerors, Greek, Scythian, Arab, Moghal, that entered the country by land became more or less absorbed in the indigenous population, their physique changed, their individuality vanished, their energy was sapped, and dominion passed from their hands into those of more vigorous successors.

803. For the origin of the Aryo-Dravidian type we need not travel beyond the ingenious hypothesis put forward by Dr. Hoernle twenty years ago and confirmed by the recent researches of Dr. Grierson's Linguistic Survey. The Aryo-Dravidians Dr. Hoernle's theory. This theory supposes that after the first swarm of Indo-Aryans had occupied the Punjab, a second wave of Aryan-speaking people, the remote ancestors of the Aryo-Dravidians of to-day, impelled by some ethnic upheaval, or driven forward by the change of climate in Central Asia to which we have referred above, made their way into India through Gilgit and Chitral and established themselves in the plains of the Ganges and Jumna, the sacred Middle-land (*Madhyadesa*) of Vedic tradition. Here they came in contact with the Dravidians; here by the stress of that contact, caste was evolved; here the Vedas were composed and the whole fantastic structure of orthodox ritual and usage was built up. For the linguistic evidence in favour of this view I must refer the reader to Dr. Grierson's Chapter on language. For my present purpose it is sufficient to note that the record of physical characters bears out the conclusions suggested by philology. The type of the people now dwelling in the Middle-land is precisely what might have been expected to result from the incursion of a fair long-headed race, travelling by a route which prevented women from accompanying them, into a land inhabited by dark-skinned Dravidians. The men of the stronger race took to themselves the women of the weaker, and from these unions was evolved the mixed type which we find in Hindustan and Bihar. The degree of intermixture varied to the extent indicated in the detailed tables of measurements; at one end of the scale the type approaches the Indo-Aryan, at the other it almost merges in the Dravidian.

It may be said that the theory of a second wave of Aryans, resting as it does on the somewhat uncertain data of philology, is not really required for the purpose of explaining the facts. Why should we not content ourselves by assuming that the original Indo-Aryans outgrew their settlements on the Indus and throw off swarms of emigrants who passed down the Ganges valley, modifying their type as they went by alliances with the Dravidian inhabitants? But on this view of the problem it is difficult to account for the marked divergence of type that distinguishes the people of the Eastern Punjab from the people of Western Hindustan. If there had been no second and distinct incursion coming in like a wedge behind the original colonists, no such sharp contrast would now be discernible. One type would melt into the other by perceptible gradations and scientific observation and popular impression not concur, as they do in affirming that a marked change takes place where about the longitude of Sirhind—a name which itself preserves tradition of an ethnic frontier. Nor is this the only point in favour of Dr. Hoernle's hypothesis. It further explains how it is that the Vedas contain no reference to the route by which the Aryans entered India or earlier settlements on the Indus; and it accounts for the antagonism between the Eastern and Western sections and for the fact that the latter were as comparative barbarians by the more cultured inhabitants of the Middle-land.

804. When we leave Bihar and pass on eastward into the steamy of Bengal, the Indo-Aryan element thins out rapidly and appears in sporadic form. The bulk of the population is Dravidian, modified by

of Mongoloid blood which is relatively strong in the East and appreciably weaker in the West. Even in Bengal, however, where the Indo-Aryan factor is so small as to be hardly traceable, certain exceptions may be noticed. The tradition cherished by the Brāhmins and Kāyasthas of Bengal that their ancestors came from Kanauj at the invitation of King Adisur to introduce Vedic ritual into an unhallowed region is borne out to a substantial degree by the measurements of these castes, though even among them indications are not wanting of occasional intermixture with Dravidians.* If, however, the type is regarded as a whole the racial features are seen to be comparatively distinct. The physical degeneration which has taken place may be due to the influence of a relaxing climate and an enfeebling diet, and still more perhaps to the practice of marrying immature children, the great blot on the social system of the upper classes of Bengal.

The Scytho-
Dravidian
type

805. Of the foreign elements that have contributed to the making of the Indian people two have now been passed in review. We have seen the Indo-Aryan type maintaining a high degree of purity in the Punjab and Rajputana, transformed by an increasing admixture of Dravidian blood in Hindustan and Bihar, and vanishing beyond recognition in the swamps of Lower Bengal. We have found the Mongoloid races predominant on the eastern and northern frontiers, confined to the hills where the people of the plains were strong, but further east, where they came in contact with feebler folk, mixing with the Dravidian element to form the type characteristic of the mass of the population of Bengal and Assam. A third foreign element still remains to be accounted for. It has long been known, mainly from Chinese sources, supplemented by the evidence of coins and the uncertain testimony of Indian tradition, that long after the settlement of the Indo-Aryans in the Punjab successive swarms of nomadic people, vaguely designated Sakās or Scythians, forced a way into India from the west, and established their dominion over portions of the Punjab, Sind, Gujarat, Rajputana, and Central India. The impulse which started them on their wanderings may be traced in some instances to tribal upheavals in far distant China, while in other cases bands already on the move were pushed forward from Central Asia. All these peoples came from regions which, so far as we know, have from time immemorial been occupied by broad-headed races.

Its history

806. In the time of the Achaemenian kings of Persia the Scythians who were known to the Chinese as Sse occupied the regions lying between the lower course of the Sillis or Jaxartes and lake Balkash. We learn from Herodotus that according to the opinion of classical antiquity these Scythians were riding people who wore breeches and used bows of a fashion of their own. It may be gathered from other sources that the empire of the Scythians extended up to the plains of Eastern Turkestan. In the sixth century B.C. the Scythians, who were then renowned for their valour and their riches, came within the scope of the ambitious policy of Cyrus. Their king Amorges was made prisoner, but Sparethra, his wife, rallied the remains of the army, repulsed the Persians, and compelled them to surrender her husband in exchange for the prisoners she had taken. Notwithstanding this temporary success the Scythians were nevertheless recognized as tributaries of the Persians, and the portion of Turkestan which they occupied formed the twentieth Satrapy of the Persian Empire. Later on they regained their independence, for at the battle of Arbela we find them fighting on the Persian side no longer as subjects but of great lance. The fragments of early Scythian history which may be collected from the confines of India are supplemented by the Chinese annals which tell us how the Hsiung-nu, who were originally located in Southern China, occupied Bactriana and Transoxiana at the beginning of the establishment of the Græco-Bactrian monarchy about the year 250 B.C. Dislodged from these regions by the Yuechi, who had themselves by incursion. Without at first flight by the Huns, the Sse invaded Bactriana, an enterprise in the valley of which they were frequently allied with the Parthians. To this circumstance, which exists between the Scythian of Israel walvy, may be due the resemblance which at a later period the Yuechi India and those of the Parthian kings. Further advance and drove the Scythians out of Bactriana, and the latter crossed the Hindukush and entered the valley of the Indus. The Scythians largely in the ex-

* See Chandra Dutt, C.I.E., pointed out long ago that "the Dravidian blood is largely in the ex- community of Bengal." Calcutta Review, LXXV, page 238.

country called after them Sakastan, comprising Segistan, Arachosia, and Drangiana. But they were left in possession only for 100 years, for in the year 25 B. C. the Yuechi disturbed them again. A body of Scythians then emigrated eastward and founded a kingdom in the western portion of the Punjab. The route they followed on their advance upon India is uncertain; but to a people of their habits who were already located in Sakastan it would seem that the march through Baluchistan and Kachhi would have presented no serious difficulty. Among the sculptured figures on the rock of Behistan there is one which bears the name of Sakuka the Scythian. Khanikoff, writing in 1866, professed to recognize in this figure the features of a Kirghiz of the present day. Ujfalvy, however, regards the statement as doubtful. He says that he has never seen a Kirghiz with such a luxuriant beard, and the physiognomy of the figure in question appears to him to be Turko-Tartar presenting a mixture of Mongolian and Aryan lineaments.

807. The Indo-Scythian Yuechi, afterwards known as the Tokhari, while settled in Eastern Turkestan to the south of the Tian Shan range were defeated by the Hsiung-nu or Huns in 201-165 B. C. They fled towards the west, crossed the mountains and took possession of the part of Bactriana inhabited by the Tajiks. A portion of them remained in Eastern Turkestan in the mountainous country to the south-west of Khotan. The Chinese called these people the Siao or little Yuechi in order to distinguish them from the others whom they designated the Ta or great Yuechi. The Yuechi occupied Central Asia and the north-west of India for more than five centuries from 130 B. C. to 425 A. D. The Hindus called them Sakās and Turushkas, but their kings seem to have known of no other dynastic title than that of Kushan. The Chinese annals tell us how Kitolo, Chief of the great Kushans, whose name is identified with the Kṛdara of the coins, giving way before the incursions of the Ephthalites crossed the Paropamisus and founded in the year 425 of our era the kingdom of Gāndhāra of which in the time of his son Peshawar became the capital. Fifty years later the Ephthalites took possession of Gāndhāra and forced the Kushans to retreat into Chitral, Gilgit, and Kashmir.

808. Just at the time when the Kushans were establishing themselves in Gāndhāra, the Ephthalites or Hōa of the Chinese annals, who were then settled on the north of the great wall of China, being driven out of their territory by the Juan-Juan started westward and overran in succession Sogdiana, Khwarizm, Bactriana, and finally the north-west portion of India. Their invading movements reached India in the reign of Skanda Gupta, 452—480, and brought about the disruption of the Gupta Empire. The Ephthalites were known in India as Huns. The leader of the invasion of India, who succeeded in snatching Gāndhāra from the Kushans and established his capital at Sakala, is called by the Chinese Lāelih and the inscriptions enable us to identify him with the original Lakhan Udayaditya of the coins. His son Toramana (490—515) took possession of Gujarāt, Rajputana and portion of the Ganges valley, and in this way the Huns came into possession of the ancient Gupta kingdom. Toramana's successor Mihirakula (515—544) added at the beginning of his reign Kashmir to his kingdom, but eventually succumbed to the combined attack of a confederation of the Hindu Princes of Malwa and Magadha.

809. These are the historical data. Scarcely as they are, they serve to establish the fact that during a long period of time swarms of nomadic people, whose outlandish names are conveniently summed up in the generic term Scythian, poured into India, conquered and governed. Their coins are now the only memorial of their rule, but their invasions probably began many centuries before coins were struck or annals compiled. Of the people themselves all traces to have vanished and the student who enquires what has become of them finds nothing more tangible than the modern conjecture that they are represented by the Jats and Rajputs. But the grounds for this opinion are of the flimsiest description and consist mainly of the questionable assumption that who are called Jats at the present day must have something to do with who were known to Herodotus as Getae. Now apart from the fallacies of this argument, witness the Roman inscriptions which bear good historical reason that the Scythians who came to India came from a region occupied by broad-headed races and must themselves have belonged to it.

were by all accounts nations or hordes of horsemen, short and sturdy of stature, and skilled in the use of the bow. In their original homes on the Central Asian steppes their manner of life was that of pastoral nomads; and their instincts were of the predatory order. It seems therefore *prima facie* unlikely that their descendants are to be looked for among tribes who are essentially of the long-headed type, tall heavy men without any natural aptitude for horsemanship, settled agriculturists with no traditions of a nomadic and marauding past. Still less probable is it that waves of foreign conquerors entering India at a date when the Indo-Aryans had long been an organized community should have been absorbed by them so completely as to take rank among their most typical representatives, while the form of their heads, the most persistent of racial distinctions, was transformed from the extreme of one type to the extreme of another without leaving any trace of the transitional forms involved in the process. Such are the contradictions which beset the attempt to identify the Scythians with the Jāts and Rājputs. The only escape from them seems to lie in an alternative hypothesis which is suggested by the measurements summarised in the Scytho-Dravidian Table. These data show that a zone of broad-headed people may still be traced southwards from the region of the Western Punjab in which we lose sight of the Scythians, right through the Deccan till it attains its furthest extension among the Coorgs. Is it not conceivable that this may mark the track of the Scythians who first occupied the great grazing country of the Western Punjab and then, pressed upon by later invaders and finding their progress eastward blocked by the Indo-Aryans, turned towards the south, mingled with the Dravidian population and became the ancestors of the Marāthās? The physical type of the people of the Deccan accords fairly well with this theory, while the arguments derived from language and religion do not seem to conflict with it. For, after entering India the Scythians readily adopted an Aryan language written in the Kharosthi character and accepted Buddhism as their religion. These they would have carried with them to the south. Their Prākṛit speech would have developed into Marāthi while their Buddhistic doctrines would have been absorbed in that fusion of magic and metaphysics which has resulted in popular Hinduism. Nor is it wholly fanciful to discover some aspects of Marāthā history which lend it incidental support. On this view the wide-ranging forays of the Marāthās, their guerilla methods of warfare, their unscrupulous dealings with friend and foe, their genius for intrigue and their consequent failure to build up an enduring dominion, and finally the individuality of character and tenacity of purpose which distinguish them at the present day—all these may be regarded as parts of the inheritance which has come to them from their Scythian ancestors.

Social
divisions
the tribe.

810. Up to this point I have been dealing with the racial divisions of the people of India, with Ethnology properly so called. I now turn to their social divisions, to the Ethnographic data as distinguished from the Ethnological. These divisions are either tribes or castes, which in their turn are further sub-divided with reference usually to matrimonial considerations. A tribe as we find it in India is a collection of families or groups of families bearing a common name which as a rule does not denote any specific occupation; generally claiming common descent from a mythical or historical ancestor and occasionally from an animal, but in some parts of the country held together rather by the obligations of blood-feud than by the tradition of kinship; usually speaking the same language and occupying, not possessing, claiming to occupy a definite tract of

A tribe is not necessarily exogamous; that is to say, it is not an invariable rule that a man of a particular tribe must marry a woman of that tribe nor that he cannot marry a woman of a different tribe.

11. We may distinguish several kinds of tribes in various parts of India though it cannot be said that each of the seven racial types has its own distinctive form of tribe, nevertheless the correspondence between the two sets of divisions is sufficiently close to warrant the conjecture that each type was organized on a characteristic tribal basis and that, where tribes have disappeared, their disappearance has been effected by caste, incessantly absorbing the tribal divisions which it found in possession of particular localities. In describing the varieties of tribes I shall therefore follow the order determined by physical characters.

812. The *Dravidian* tribe exists in its most compact and vigorous form among the people of Chota Nagpur. Descriptions of two typical instances are given in the Appendix under the heads of Munda and Santal. Such a tribe is usually divided into a number of exogamous groups, each of which bears the name of an animal or plant common in the locality. Usually also there is a distinct village organization comprising in its most developed forms a headman with his assistant and a priest with various acolytes whose business it is to propitiate the various undefined powers from whom physical ills are to be apprehended. Another remarkable instance of the tribal organization of the Dravidians is to be found among the Kandhs or Kondhs of the Orissa Kandh Māls, once infamous for the human sacrifices which they offered to propitiate the earth goddess with the object of ensuring good crops and immunity from disease and accidents. A grim memorial of these forgotten horrors is to be seen in the Madras Museum in the form of a rude representation in wood of the head and trunk of an elephant pivoted on a stout post. To this the victim was bound head downwards and the machine was slowly turned round in the centre of a crowd of worshippers who hacked and tore away scraps of flesh to bury in their fields, chanting the while a ghastly hymn an extract from which illustrates very clearly the theory of sympathetic magic underlying the ritual—

As the tears stream from thine eyes,
So may the rain pour down in *Ār*;
As the mucus trickles from thy nostrils,
So may it drizzle at intervals,
As thy blood gushes forth
So may the vegetation sprout;
As thy gore falls in drops,
So may the grains of rice form.

A number of these wooden elephants, which had been used at sacrifices, were found and burnt by the British officers who put down human sacrifice in the Kandh country. The worm-eaten specimen at Madras is probably unique. The Kandhs are divided into 50 *gochis* or exogamous sects, each of which bears the name of a *muta* or village, believes all its members to be descended from a common ancestor, and as a rule dwells as a body of blood-relations in the commune or group of villages after which it is called. The Kandh *gochi* appears, therefore, to represent the nearest approach that has yet been discovered to the local exogamous tribe believed by Mr. McLennan to be the primitive unit of human society.

813. The *Mongoloid* type of tribe as found in the Nāgā Hills is divided somewhat on the same pattern as the Kandhs into a number of *Khels*, each of which is in theory an exogamous group of blood-relations dwelling apart in its own territory and more or less at war with the rest of the world. Each *Khel* fortifies the locality which it inhabits with a stockade, a deep ditch full of bamboo calthrops, and a craftily devised ladder, and raids are constantly made by one upon the other for the purpose of capturing wives. So far as our present researches have gone no very clear traces have been found of totemism among the Mongoloid races of India, but the Mongoloid people of the Eastern Himalayas and the Chittagong Hills have a singular system of exogamous groups based upon their real or mythical ancestors. Instances of this grotesque variant of eponymy are the Chakmā clans *Ich'nochā*, 'the man who ate rotten shrimps,' *Pirā bhāngē*, 'the fat man who has been stool,' *Aruyā*, 'the skeleton,' and so forth.

814. Among the *Turko-Iranian* tribe:—

(a) Tribes based upon kinship like the Afghān, known as Pathāns or speakers of the Pashtu language. One Qais Abdur Rashid who lived in the country immediately to the north of Koh-i-Sulimān and was 37th in descent from Malik, who, according to theory, says Mr. Hughes-Buller in his admirable account of Baluchistan, "an Afghān tribe is constituted from a number of groups of agnates; that is to say, descent is through the father, and he inherits the blood of his father. Affiliated with a good name are to be found a certain number of alien groups known as *sayah*. The latter term means 'living in the same'

